



NATIONAL TRANSPORTATION SAFETY BOARD - **Public Hearing**

Conrail Derailment in Paulsboro, NJ with Vinyl Chloride Release

GROUP	3
EXHIBIT	
BT	

Agency / Organization

New Jersey Dept. of Health

Title

Gloucester County - Public Employees
Occupational Safety and Health Violations



State of New Jersey

DEPARTMENT OF HEALTH

DIVISION OF EPIDEMIOLOGY, ENVIRONMENTAL AND OCCUPATIONAL HEALTH

PO BOX 369

TRENTON, N.J. 08625-0369

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

www.nj.gov/health

MARY E. O'DOWD, M.P.H.
Commissioner

MEMORANDUM

To: Howard Black, Director
Division of Public Safety and Occupational Safety and Health
New Jersey Department of Labor and Workforce Development

From: Michael A. Coyne, MS *ma*
Enforcement Coordinator
Public Employees Occupational Safety and Health Program

Subject: Violations of the PEOSH Act
Inspection #: 316609908-Programmed

Date: June 13, 2013

I certify that the items on the Order to Comply are violations of N.J.S.A. 34:6A-25 et seq. In addition, a copy of the contact information for the complainant and/or employee representative is attached.

Attachments

Employer Representative

Joseph T. Butts, Director
Gloucester County Emergency Response Center
120 North Delsea Drive
Clayton NJ 08312

Additional Citation Mailings

Richard Sumek, Volunteer Chief
Washington Township Fire District
2039 Glassboro-Cross Keys Road
Williamstown NJ 08094

Alfred Morgan
IAFF Local 4204
P.O. Box 653
Turnersville NJ 08012

James Lee
IAFF Local 4320
P.O. Box 653
Turnersville NJ 08012

New Jersey Department of Labor and Workforce Development
Office of Public Employees' Occupational Safety and Health
1 John Fitch Way – 3rd Floor
PO Box 386
Trenton, NJ 08625
Phone: (609) 984-1389



NOTICE OF ORDER TO COMPLY

To:

Chad M. Bruner, County Administrator
Gloucester County
2 South Broad Street
Woodbury NJ 08096

Inspection Number: 316609908

Complaint Number: 208689604

Inspection Date(s): 12/27/2012 & 1/15/2013

Issuance Date: 6/13/2013

CSHO: Michael Boucher

Reason: Complaint

Inspection Site:

Gloucester County
Emergency Reponse Center
1200 North Delsea Drive
Clayton NJ 08312

The Violation(s) described in this Citation and Notification of Penalty is (are) alleged to have occurred on or about the day(s) the inspection was made unless otherwise indicated within the description below.

The enclosed Order to Comply describes violations of the Public Employees' Occupational Safety and Health Act. The violations referred to in this Order must be abated by the dates listed unless within 15 working days (excluding weekends and State holidays) from the issuance of this Order to Comply you mail a notice of intent to contest to the Department of Labor and Workforce Development at the address shown above. Please refer to the enclosed Public Employees' Occupational Safety and Health Act which outlines your rights and responsibilities and which should be read in conjunction with this form. The Order will become the Final Order if no notice of intent to contest is filed as provided for in the Act or, if contested, the Order is affirmed by the Review Commission or a court.

Posting - The law requires that a copy of this Notice and the Order to Comply be posted immediately in a prominent place at or near the location of each violation cited herein, or, if it is not practicable because of the nature of the employer's operations, where it will be readily observable by all affected employees. This Order must remain posted until each violation cited herein has been abated, or for 15 working days (excluding weekends and State holidays), whichever is longer.

Informal Conference - An informal conference is not required. However, if you wish to have such a conference you may request one with the Office of Public Employees' Occupational Safety and Health during the 15 working day contest period by contacting the office shown above. During such an informal conference you may present any evidence or views which you believe would support an adjustment to the citation(s).

If you are considering a request for an informal conference to discuss any issues related to the Order to Comply, a written letter of intent to contest must be submitted to the Office of Public Employees' Occupational Safety and Health within 15 working days of issuance of the Order. The contest period is not interrupted by a request for an informal conference.

If you decide to request an informal conference, the Office of Public Employees' Occupational Safety and Health will schedule the conference, which will be conducted within 30 days of receipt of the request. Employees and/or employee representatives will be notified of their right to attend the conference. The Office of Public Employees' Occupational Safety and Health will arrange for representatives of the Department of Health to conduct conferences requested from Orders to Comply issued pursuant to a certification from the Commissioner of that an employer violation has been determined to exist within the Department of Health's jurisdiction under the Act.

Any and all supporting documentation of existing conditions as well as any abatement steps taken thus far must be brought to the conference. If conditions warrant, an informal settlement agreement, which amicably resolves this matter without litigation or contest may be entered into.

Right to Contest - You have the right to contest this Order to Comply. You may contest all citation items or only individual items. You may also contest abatement dates without contesting the underlying violations. **Unless you inform the Office of Public Employees' Occupational Safety and Health in writing that you intend to contest the citation(s) and/or abatement dates within 15 working days of the issuance of this Order to Comply, then this Order to Comply shall become a final order.**

Penalties - The Act provides that if the time for compliance with an order of the Commissioner elapses, and the employer has not made a good faith effort to comply, the Commissioner shall impose a civil administrative penalty of up to \$7,000 per day for each violation of a provision of N.J.S.A. 34:6A-25 et seq., or of a standard or regulation promulgated under that act, or of an order to comply. Any employer who willfully or repeatedly violates the requirements of this section or any standard, rule, order or regulation promulgated under that act shall be assessed a civil administrative penalty of up to \$70,000 for each violation. Penalties imposed under this section may be recovered with costs in a civil action commenced by the Commissioner by a summary proceeding under "the penalty enforcement law" (N.J.S.A. 2A:58-1 et seq.) in the Superior Court or a municipal court, either of which shall have jurisdiction to enforce "the penalty enforcement law" in connection with this act. If the violation is of a continuing nature, each day during which it continues after the date given for compliance in accordance with the order of the Commissioner shall constitute an additional separate and distinct offense. If this penalty remains unpaid for more than 30 days, this order shall be recorded on the Judgment docket of the Superior Court.

Penalties will be based upon factors such as gravity of the violation, the probability that an injury or illness would result from the hazard, the good faith efforts of the employer to comply, the presence of meaningful safety and health programs and the history of previous violations.

Request to Delay Issuance of Penalty Order to Comply – When an employer submits a request to delay the issuance of an Order to Comply establishing penalties, the employer shall submit such written request 10 calendar days prior to the abatement date(s) established in the original Order to Comply.

Notification of Corrective Action - For each violation which you do not contest, you are required by 29 CFR 1903.19 to submit an Abatement Certification to the New Jersey Department of Health and Senior Services, PEOSH Program. This certification must be sent by you prior to the abatement date indicated on the citation. For **Willful** and **Repeat** violations, documents (example: photos, copies of receipts, training records, etc.) demonstrating that abatement is complete must accompany the certification. Where the citation is classified as **Serious** and the citation states that abatement documentation is required, documents such as those described

above are required to be submitted along with the abatement certificate. If the citation indicates that the violation was corrected during the inspection, no abatement certification is required for that item.

Employer Discrimination Unlawful - The law prohibits discrimination by an employer against an employee for filing a complaint or for exercising any rights under this Act. An employee who believes that he/she has been discriminated against may file a complaint, no later than 180 days after the employee first had knowledge that such discrimination occurred, with the Office of Public Employees' Occupational Safety and Health at the address shown above.

Employer Rights and Responsibilities - The enclosed copy of the Public Employees' Occupational Safety and Health Act outlines additional employer rights and responsibilities and should be read in conjunction with this notification.

Notice to Employees - The law gives an employee or an employee representative the opportunity to object to any abatement date set for a violation if he/she believes the date to be unreasonable. The contest must be mailed to the Office of Public Employees' Occupational Safety and Health at the address shown above and postmarked within 15 working days (excluding weekends and State holidays) of the issuance of this Order to Comply.

Howard Black, Director
Division of Public Safety and Occupational Safety and Health

BY:

 ** PII **

John Patterson, Chief
Office of Public Employees Occupational Safety and Health

**New Jersey Department of Labor and Workforce Development
Office of Public Employees' Occupational Safety and Health (OPEOSH)**

NOTICE TO EMPLOYEES

An informal conference has been scheduled with OPEOSH to discuss the Notice of Unsafe or Unhealthy Working Conditions (Notice) issued on 6/13/2013. The conference will be held at the OPEOSH office located at 1 John Fitch Way, 3rd Floor, PO Box 386, Trenton NJ 08625 on

_____ at _____. Employees and/or representatives of employees have a right to attend an informal conference.

Notice of Unsafe or Unhealthful Working Conditions

Inspection Site:
Gloucester County
Emergency Response Center
1200 North Delsea Drive
Clayton NJ 08312

Inspection Number: 316609908
Complaint Number: 208689604
Inspection Date(s): 12/27/2012 & 1/15/2013
Issuance Date: 6/13/2013
CSHO: Michael Boucher
Reason: Complaint

Citation 1 Item 1s Type of Violation: **Serious**

29 CFR 1910.120(f)(3)(i)(A) Medical examinations and consultations were not made available by the employer to each employee covered under 29 CFR 1910.120(f)(2)(i), (ii), and (iv) prior to assignment.

LOC: Facility Wide

The Gloucester County Chemical Biological Radiological Nuclear and Explosives (CBRNE) Team did not provide a baseline medical examination and consultation to employees that are required to perform the duties of hazardous materials technician prior to their assignment to the team. The medical examinations being provided by the employer, as well as those being accepted by the employer from contributing agencies, only approve employees for respirator use, and do not meet the requirements for a hazardous materials technician.

Date By Which Violation Must be Abated: **July 15, 2013**

PER DIEM PENALTIES BEGINNING ON **July 16, 2013** **\$2,800**

Citation 1 Item 2s Type of Violation: **Serious**

29 CFR 1910.120(f)(3)(i)(B) Medical examinations and consultations were not made available by the employer to each employee covered under 29 CFR 1910.120(f)(2)(i), (ii), and (iv) at least once every 12 months unless the attending physician believed a longer interval (not greater than biennially) was appropriate.

LOC: Facility Wide

The Gloucester County CBRNE Team did not offer an annual medical examination and consultation to employees that are required to perform the duties of hazardous materials technician. The annual medical examinations being provided by the employer, as well as those being accepted by the employer from contributing agencies, only approve employees for respirator use, and do not meet the requirements for a hazardous materials technician.

Date By Which Violation Must be Abated: **July 15, 2013**

PER DIEM PENALTIES BEGINNING ON **July 16, 2013** **\$2,800**

Notice of Unsafe or Unhealthful Working Conditions

Inspection Site:

Gloucester County
Emergency Response Center
1200 North Delsea Drive
Clayton NJ 08312

Inspection Number: 316609908

Complaint Number: 208689604

Inspection Date(s): 12/27/2012 & 1/15/2013

Issuance Date: 6/13/2013

CSHO: Michael Boucher

Reason: Complaint

Citation 1 Item 3s

Type of Violation: **Serious**

29 CFR 1910.120(f)(3)(i)(C) Medical examinations and consultations were not made available by the employer to each employee covered under 29 CFR 1910.120(f)(2)(i), (ii), and (iv) at termination of employment or reassignment to an area where the employee would not be covered if the employee had not had an examination within the last six months.

LOC: Facility Wide

The Gloucester County CBRNE Team did not offer an exit medical examination and consultation to employees that are required to perform the duties of hazardous materials technician upon their termination from the team. Following the Paulsboro train derailment HAZMAT spill on November 30, 2012, eight (8) technician-level trained members from Washington Township Fire District resigned from the Gloucester County CBRNE Team at the fire district's public meeting on December 6, 2012.

Date By Which Violation Must be Abated:

July 15, 2013

PER DIEM PENALTIES BEGINNING ON

July 16, 2013

\$2,800

Citation 1 Item 4s

Type of Violation: **Serious**

29 CFR 1910.120(f)(3)(i)(D) Medical examinations and consultations were not made available by the employer to each employee covered under 29 CFR 1910.120(f)(2)(i), (ii), and (iv) as soon as possible upon notification by an employee that he/she had developed signs or symptoms indicating possible overexposure to hazardous substances or health hazards or that the employee had been injured or exposed above the permissible exposure limit or published exposure levels in an emergency situation.

LOC: Facility Wide

The Gloucester County CBRNE Team did not offer a medical examination and consultation to employees that were exposed above the permissible exposure limits while performing their duties as a hazardous materials technician during an emergency response to a hazardous substance release. On November 30, 2012, 15 hazardous materials technicians from the Gloucester County CBRNE Team responded to a train bridge derailment in Paulsboro, New Jersey, that resulted in exposure to vinyl chloride above the permissible exposure limit.

Date By Which Violation Must be Abated:

July 15, 2013

PER DIEM PENALTIES BEGINNING ON

July 16, 2013

\$2,800

Notice of Unsafe or Unhealthful Working Conditions

Inspection Site:

Gloucester County
Emergency Response Center
1200 North Delsea Drive
Clayton NJ 08312

Inspection Number: 316609908

Complaint Number: 208689604

Inspection Date(s): 12/27/2012 & 1/15/2013

Issuance Date: 6/13/2013

CSHO: Michael Boucher

Reason: Complaint

Citation 1 Item 5s Type of Violation: **Serious**

29 CFR 1910.120(f)(3)(ii) For employees who may have been injured, received a health impairment, developed signs or symptoms which may have resulted from exposure to hazardous substance resulting from an emergency incident, or exposed during an emergency incident to hazardous substances at concentrations above the permissible exposure limits or the published exposure levels without the necessary personal protective equipment being used, a medical examination and consultation was not offered as soon as possible following the emergency incident or development of signs or symptoms.

LOC: Facility Wide

The Gloucester County CBRNE Team did not offer employees who may have been injured, received a health impairment, developed signs or symptoms which may have resulted from exposure to hazardous substances resulting from an emergency incident, or exposed during an emergency incident to hazardous substances at concentrations above the permissible exposure limits or published exposure levels without the necessary personal protective equipment being used, a medical examination and consultation was not offered as soon as possible following the emergency incident or development of signs or symptoms. On November 20, 2012, nine (9) members of the Washington Township Fire District that perform DECON for the Gloucester County CBRNE Team responded to a train bridge derailment in Paulsboro, New Jersey, which resulted in exposure to vinyl chloride above permissible exposure limit.

Date By Which Violation Must be Abated:

July 15, 2013

PER DIEM PENALTIES BEGINNING ON

July 16, 2013

\$2,800

Notice of Unsafe or Unhealthful Working Conditions

Inspection Site:

Gloucester County
Emergency Reponse Center
1200 North Delsea Drive
Clayton NJ 08312

Inspection Number: 316609908

Complaint Number: 208689604

Inspection Date(s): 12/27/2012 & 1/15/2013

Issuance Date: 6/13/2013

CSHO: Michael Boucher

Reason: Complaint

Citation 1 Item 6s

Type of Violation: **Serious**

29 CFR 1910.120(q)(1) The employer did not develop and implement a written emergency response plan which included the requirements in 29 CFR 1910.120.

LOC: Facility Wide

The Gloucester County CBRNE Team did develop a written emergency response plan, but did not conduct a critique of the response and follow-up per their emergency response plan. During the interview process, employees complained of the lack of response from the employer regarding a review of their response to the incident, and what items could have been handled differently to aid in future deployments. A "Hot Wash" of post-incident topics was conducted by Unified Command on January 18, 2013, regarding the emergency response to the Paulsboro train derailment; however, representatives from the Gloucester County CBRNE Team were not in attendance.

Date By Which Violation Must be Abated:

July 15, 2013

PER DIEM PENALTIES BEGINNING ON

July 16, 2013

\$2,800

Citation 1 Item 7s

Type of Violation: **Serious**

29 CFR 1910.120(q)(3)(iv) Employees engaged in emergency response and exposed to hazardous substances presenting an inhalation hazard or potential inhalation hazard, did not wear positive-pressure self-contained breathing apparatus until such time that the individual in charge of the ICS determined through the use of air monitoring that a decreased level of respiratory protection would not result in hazardous exposures to employees.

LOC: Facility Wide

Fifteen (15) hazardous materials technicians from the Gloucester County CBRNE Team, assisted by nine (9) members of the Washington Township Fire District for DECON purposes, did not wear positive pressure self-contained breathing apparatus while engaged in the emergency response; although, air monitoring showed an elevated level of respiratory protection would be required to prevent hazardous exposures to employees.

Date By Which Violation Must be Abated:

ABATED on: January 15, 2013

Notice of Unsafe or Unhealthful Working Conditions

Inspection Site:

Gloucester County
Emergency Response Center
1200 North Delsea Drive
Clayton NJ 08312

Inspection Number: 316609908

Complaint Number: 208689604

Inspection Date(s): 12/27/2012 & 1/15/2013

Issuance Date: 6/13/2013

CSHO: Michael Boucher

Reason: Complaint

Citation 1 Item 8s Type of Violation: **Serious**

29 CFR 1910.120(q)(6)(iii)(A) Hazardous material technicians that have received at least 24 hours of training equal to the first responder operations level did not have competency in knowing how to implement the employer's emergency response plan.

LOC: Facility Wide

Hazardous Materials Technicians that have received training equal to the first responder operations level did not demonstrate competency in implementing the employer's emergency response plan (ERP). The employer's ERP was not fully implemented since training on the plan had not been conducted and the plan was not accessible to employees, as had been requested 10 months prior to the Paulsboro train derailment.

Date By Which Violation Must be Abated:

July 15, 2013

PER DIEM PENALTIES BEGINNING ON

July 16, 2013

\$2,800

Citation 1 Item 9s

Type of Violation: **Serious**

29 CFR 1910.120(q)(8)(i) Employees who were trained in accordance with 29 CFR 1910.120(q)(6) did not receive annual refresher training of sufficient content and duration to maintain their competencies or did not demonstrate competency in those areas at least yearly.

LOC: Facility Wide

The Gloucester County CBRNE Team did not provide annual refresher training to sufficient content and duration to maintain their competencies or did not demonstrate competency in those areas at least yearly.

Date By Which Violation Must be Abated:

July 15, 2013

PER DIEM PENALTIES BEGINNING ON

July 16, 2013

\$2,800

Notice of Unsafe or Unhealthful Working Conditions

Inspection Site:

Gloucester County
Emergency Reponse Center
1200 North Delsea Drive
Clayton NJ 08312

Inspection Number: 316609908

Complaint Number: 208689604

Inspection Date(s): 12/27/2012 & 1/15/2013

Issuance Date: 6/13/2013

CSHO: Michael Boucher

Reason: Complaint

Citation 1 Item 10s Type of Violation: **Serious**

29 CFR 1910.120(q)(8)(ii) The employer did not provide a statement of training or competency, and if a statement of competency is made, the employer did not provide a record of the methodology used to demonstrate competency.

LOC: Facility Wide

The Gloucester County CBRNE Team could not provide any documentation of training, or a statement of competency, for the hazardous materials technicians. The employer is required to retain training records or a record of the methodology used to demonstrate competency.

Date By Which Violation Must be Abated:

July 15, 2013

PER DIEM PENALTIES BEGINNING ON July 16, 2013

\$2,800

Citation 1 Item 11s Type of Violation: **Serious**

29 CFR 1910.134(c)(1) A written respiratory protection program that included the provisions in 1910.134(c)(1)(i) - (ix) with worksite specific procedures was not established and implemented for required respirator use.

LOC: Facility Wide

The Gloucester County CBRNE Team had not developed and implemented a respiratory protection program for the employees using the Scott Safety self-contained breathing apparatus (SCBA) and the full-facepiece air-purifying respirators. The current written program is constructed for a law enforcement agency, and not a hazardous materials response team, with inappropriate sections including respirators that have not been issued to team members, fit test procedures that are not being used, and no mention of the Scott Safety SCBA units being employed by the employees.

Date By Which Violation Must be Abated:

July 15, 2013

PER DIEM PENALTIES BEGINNING ON July 16, 2013

\$2,800

Notice of Unsafe or Unhealthful Working Conditions

Inspection Site:

Gloucester County
Emergency Response Center
1200 North Delsea Drive
Clayton NJ 08312

Inspection Number: 316609908

Complaint Number: 208689604

Inspection Date(s): 12/27/2012 & 1/15/2013

Issuance Date: 6/13/2013

CSHO: Michael Boucher

Reason: Complaint

Citation 1 Item 12s Type of Violation: **Serious**

29 CFR 1910.134(1) The employer did not conduct evaluations of the workplace as necessary to ensure that provisions of the current written program are being effectively implemented and that it continues to be effective.

LOC: Facility Wide

The Gloucester County CBRNE Team did not follow the written procedures for regularly evaluating the effectiveness of its respiratory protection program to reflect those changes in workplace conditions that affected respirator use which includes the requirements outlined in 29 CFR 1910.134(c). The current written program is constructed for a law enforcement agency, and not a hazardous materials response team, with inappropriate sections including respirators that have not been issued to team members, fit test procedures that are not being used, and no mention of the Scott Safety SCBA units being employed by the employees.

Date By Which Violation Must be Abated:

July 15, 2013

PER DIEM PENALTIES BEGINNING ON

July 16, 2013

\$2,800

Notice of Unsafe or Unhealthful Working Conditions

Inspection Site:

Gloucester County
Emergency Reponse Center
1200 North Delsea Drive
Clayton NJ 08312

Inspection Number: 316609908

Complaint Number: 208689604

Inspection Date(s): 12/27/2012 & 1/15/2013

Issuance Date: 6/13/2013

CSHO: Michael Boucher

Reason: Complaint

Signed on 6/13/2013 pursuant to the authority vested by law
in the New Jersey Department of Labor and Workforce Development.

Howard Black, Director
Division of Public Safety and Occupational Safety and Health

BY: 

John Patterson, Chief

Office of Public Employees Occupational Safety and Health

DISCRIMINATORY ACTS AGAINST EMPLOYEES ARE UNLAWFUL – N.J.S.A. 34:6A-45 – No person shall discharge, or otherwise discipline, or in any manner discriminate against any employee because such employee has filed any complaint or instituted or caused to be instituted any proceeding under or related to this section. Any employee who believes that he has been discharged, disciplined, or otherwise discriminated against by any person in violation of this section, may within 180 days after the employee first has knowledge such violation did occur, file a complaint with the Commissioner of Labor and Workforce Development alleging that discrimination.

c: Complainant

Howard Black, Director

Employee Representative(s)

To:
Chad M. Bruner, County Administrator
Gloucester County
2 South Broad Street
Woodbury NJ 08096

Inspection Number: 316609908
Complaint Number: 208689604
Inspection Date(s): 12/27/2012 & 1/15/2013
Issuance Date: 6/13/2013
CSHO: Michael Boucher
Reason: Complaint

Inspection Site:
Gloucester County
Emergency Reponse Center
1200 North Delsea Drive
Clayton NJ 08312

EMPLOYER REQUIREMENTS FOR ABATEMENT VERIFICATION

Employers must provide the following information to verify abatement of PEOSH citations:

1. A statement noting whether or not correction has been accomplished for each citation item and instance identified on the Citation.
2. A description of the measures taken to accomplish correction; and
3. The date the correction was made.

A blank Abatement Verification Letter is enclosed for your use in meeting this requirement. Supporting documentation e.g., drawings/photographs, purchase/work orders, air sampling results, or any other related information may be included to assist us in verifying abatement. If additional space is needed, you may attach a continuation sheet or include a more detailed letter.

If abatement cannot be accomplished by the date identified on the citation, please call the Compliance Officer (listed above right) at (609) 984-1863, 10 calendar days before the abatement date for appropriate procedures to modify the abatement date(s).

To:
Chad M. Bruner, County Administrator
Gloucester County
2 South Broad Street
Woodbury NJ 08096

Inspection Number: 316609908
Complaint Number: 208689604
Inspection Date(s): 12/27/2012 & 1/15/2013
Issuance Date: 6/13/2013
CSHO: Michael Boucher
Reason: Complaint

Inspection Site:
Gloucester County
Emergency Reponse Center
1200 North Delsea Drive
Clayton NJ 08312

REPLY TO: Michael Coyne, Enforcement Coordinator
PEOSH Program, 4th Floor
NJ Department of Health
P.O. Box 369
Trenton, NJ 08625-0369

ABATEMENT VERIFICATION LETTER

Listed below is the corrective action taken and date corrected for each citation by item and instance number.

Certification of Abatement Response by: _____

Title: _____

Date: _____

**New Jersey Department of Health and Senior Services
PEOSH Program**

OSHA 1B Form (Worksheet)

CSHO	C4835	Inspection #	316609908	Date of Inspection	01/15/2013
Employer Name	Gloucester County CBRNE Team				
Employee Name	** PII **			Occupation	Hazmat Technician
Employee Address	** PII **				
Employee City	** PII **			Employee State	NJ
Employee Zip	** PII **		Employee Phone #	** PII **	
Total # Employees	23	Total Duration	4 hours per day	Frequency	5 days per month
Standard	29 CFR 1910.120(f)(3)(i)(A)		# of Instances of the Violation		1
Type of Violation	Serious	Citation #	1	Item #	1s
				Abatement Period (# of calendar days or date abatement due)	30 Days

Description of Citation(s)

LOCATION: Facility Wide

DESCRIPTION:

The Gloucester County CBRNE Team did not provide a baseline medical examination and consultation to employees that are required to perform the duties of a hazardous materials technician prior to their assignment to the team. The medical examinations being provided by the employer, as well as those being accepted by the employer from contributing agencies, only approve employees for respirator use, and do not meet the requirements for a hazardous materials technician.

Directly from CPL 02-02-073, Inspection Procedures for 29 CFR 1910.120 and 1926.65, Paragraph (q): Emergency Response to Hazardous Substance Releases, The medical questionnaire for 1910.134 will not satisfy the HAZWOPER requirement for medical surveillance. The intent and the requirements for medical surveillance under HAZWOPER are much different than those required by the Respiratory Protection standard. The intent of the HAZWOPER medical surveillance requirements is two-fold: (1) to determine fitness-for-duty, including the ability to work while wearing PPE (e.g., respirators), and (2) to establish baseline data for comparison with future medical data.)

[29 CFR 1910.120(q)(9)(i), which pertains to employees performing emergency response to hazardous substances release, states members of an organized and designated HAZMAT team and hazardous materials specialist shall receive medical surveillance as required in paragraph (f) of this section.]

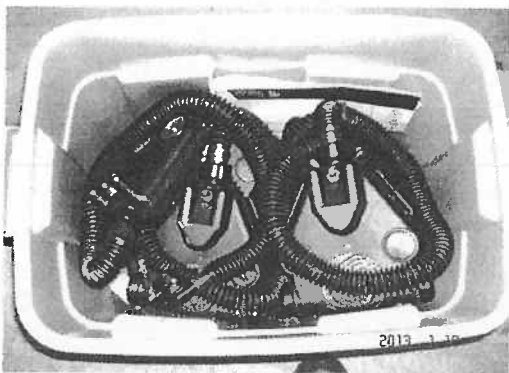
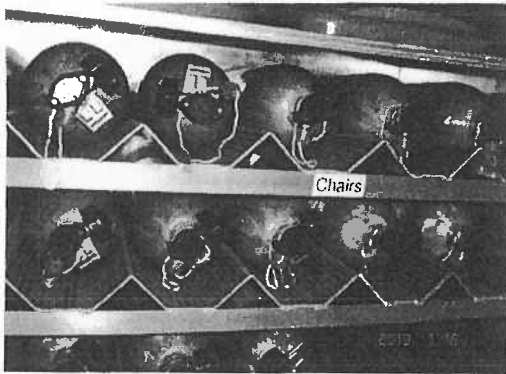
HAZARD: Members of an organized and designated HAZMAT team and hazardous materials specialists were not provided a baseline medical examination and consultation prior to assignment.

EMPLOYEE EXPOSURE: On or about January 15, 2013, the Gloucester County CBRNE Team consisted of 23 employees performing public safety and first responder job responsibilities of hazardous materials technicians. For calendar year 2012, the Gloucester County CBRNE Team responded to 61 incidents or calls for mutual aid that matched the criteria listed in Operational Guideline 2803, titled *Team Response to HAZMAT or WMD Incidents*. First responders trained in hazardous materials operations are provided by the Woodbury Fire Department as supplemental CBRNE Team members to perform DECON for the technician-level employees.

On November 30, 2012, 15 hazardous materials technicians from the Gloucester County CBRNE Team, assisted by 9 members of the Washington Township Fire District for DECON purposes, responded to a train bridge derailment in Paulsboro, New Jersey. During the accident, one of six derailed train cars, which contained 176,000-gallons of vinyl chloride, was breached releasing vinyl chloride into the air and water. Vinyl Chloride has a permissible exposure limit (PEL) of 1 part per million (ppm) with an action level of 0.5 ppm. Additionally, no employee may be exposed to vinyl chloride at concentrations greater than 5 ppm averaged over any period not exceeding 15 minutes (STEL or short-term exposure limit). During the incident, the hazardous materials technicians were stationed and operating within the "hot zone" and the first evacuation zone as identified by the incident commander. No respiratory protection was used; although, air monitoring for vinyl chloride detected levels above the PEL, STEL and action level.

EMPLOYER KNOWLEDGE: During the opening conference, Hazmat Chief Jack DeAngelo provided a copy of the Gloucester County CBRNE Team's operational guidelines. Operational Guideline 2817, titled *Hazardous Materials Technician Medical Screening*, states "members shall undergo a physical examination to identify possible pre-existing medical problems and to detect baseline measurements to identify changes over a period of time". According to Chief DeAngelo, "Gloucester County provides the current medical evaluations to its employees and will accept medical evaluations from contributing entities, such as Deptford Fire Department and the Washington Township Fire Department, as long as those evaluations meet their requirements". If a contributing agency's medical evaluation does not meet their requirements, Chief DeAngelo stated "Gloucester County would be responsible for providing the correct medical evaluation and has done so for several members". Additionally, per the *Gloucester County Hazardous Material Team Interlocal Agreement*, the Gloucester County Office of Emergency Response shall be responsible for the coordinating the efforts of the participating agencies and shall have final authority in personnel decisions; therefore, personnel not meeting their requirements would be denied membership on the CBRNE team.

The CSHO was also provided with a copy of the Gloucester County CBRNE Team's written Respiratory Protection Program, which outlines the requirements for a medical evaluation and a questionnaire be completed prior to approval for respirator use. The physician opinion letters provided by Chief DeAngelo during the inspection clearly state the referenced employee has been approved for respiratory use but has not successfully completed a Hazmat physical. The documentation being accepted by the employer, which is supplied by their occupational medical provider, Interstate Mobile Care of Sewell, New Jersey, has unchecked boxes for Hazmat physicals adjacent to the box approving respirator use.



OPERATIONAL GUIDELINE

Division:	Operations	OG 2817 HAZARDOUS MATERIALS TECHNICIAN MEDICAL SCREENING
Section:	HazMat	
Effective Date:	04/01/04	
Revision Date:	03/02/09	

GENERAL INFORMATION (SUMMARY)

This procedure shall apply to all CBRNE HazMat Team members in order to establish the guidelines for medical screening by a physician including the frequency, types, and scope of said examinations (as required in CFR 29 1910.120).

This Operational Guideline applies to all Members of the CBRNE Team responding to and during emergency incidents. All Members will be familiar with the requirements outlined in this **OG**.

POLICY

A. Medical Record

1. Federal law requires records of all HazMat examinations to be kept for 30 years after the employee leaves employment.
2. Employees are encouraged to maintain personal exposure records.

B. Medical Opinions

1. Each physical performed requires (in accordance with federal law) a written medical opinion including, but not limited to, the physician's opinion about:
 - a. If the employee has detectable medical conditions that may impair or increase the risk to the employee's health in responding to HazMat scenes and/or using respirators.
 - b. Employee physical limitations.
 - c. Results of the exam and tests.

- d. A statement that the team member has been appraised of the examination results.
2. Employees shall be provided at no cost, upon request, with a copy of the medical opinion based upon the examination.

C. Assignment, Annual and Transfer Medical Examinations

1. Team members shall receive complete physical examinations bi-annually.
2. Prior to assignment to the CBRNE Team, new members shall undergo a physical examination to identify possible pre-existing medical problems and to detect "baseline" measurements to identify changes over a period of time.
3. A bi-annual physical shall be conducted to identify changes in health and possible exposures to hazardous materials over the previous 24 months.
4. A physical shall also be conducted when any member leaves the team. The results of this examination shall be used to identify both general health and the effects of exposure to various chemicals over the tenure of his/her assignment in the CBRNE Unit. This shall not be required if a complete hazardous materials physical has been conducted within the previous three months.
5. In accordance with federal law, the content of this physical is to be determined by the physician. The tests conducted may include, but not be limited to:
 - a. Physical examination
 - b. Cardiopulmonary evaluation
 - c. Condition that increase susceptibility to injury and/or illness or that would impair work
 - d. Conditions that would affect respirator use
 - e. Relevant x-rays
 - f. Blood work
 - g. Urinalysis

D. Post-Exposure Examinations

1. A medical examination shall be required if a CBRNE Team member is exposed to a hazardous material and exhibits signs and symptoms specific to the product(s) involved (or any un-attributable sign or symptom) and/or if he/she has any unidentifiable medical problem on an incident.
2. The post-exposure examinations shall also be required if a team member has been exposed to levels above the permissible exposure limits or published

exposure levels for emergency situations whether or not there is an obvious injury/medical problem.

3. A post-exposure examination shall also be required in the event of Personal Protective Equipment failure in the Hot Zone or during Decon.
4. Post-exposure examinations may also be conducted for other incidents. This determination shall be made by the CBRNE team Safety Officer on a case-by-case basis.
5. The content of this examination shall be at the discretion of the physician depending upon the known and/or suspected products involved.

E. Special Examinations

1. The attending physician may require more frequent medical examinations if he/she determines that an increased frequency of examinations is medically necessary.
2. These examinations shall consist of tests as determined by the physician.
3. Operational members trained in the use of chemical protective clothing shall receive bi-annual CBRNE physicals.

GLOUCESTER COUNTY HAZARDOUS MATERIAL TEAM INTERLOCAL AGREEMENT

WHEREAS, the Gloucester County Board of Chosen Freeholders (the County) has created a Hazardous Material Team (the Team) for the purpose of containing actual or potential leaks or spills of hazardous substances; and

WHEREAS, it is the desire of various agencies, both public and private in Gloucester County to participate to supply manpower in this endeavor; and

WHEREAS, N.J.S.A. 40:8A-1 et seq., the New Jersey Interlocal Services Act, provides that local units government, including counties may enter into agreement for joint and/or reciprocal services.

NOW, THEREFORE, IT IS AGREED AS FOLLOWS:

1. SCOPE OF SERVICES

GENERAL

This hazardous materials team is an organized unit who is expected to handle and control actual or potential leaks or spills of hazardous substances possibly requiring immediate proximity to the substance. The Team members perform responses to releases or potential releases of hazardous substances for the purpose of control and stabilization of the incident.

PERSONNEL

The following are identified as an additional member of the team:

2. EQUIPMENT

Gloucester County agrees to provide all equipment necessary for the Team to perform consistent with the aforesaid purpose.

3. TERM

This agreement shall be perpetual except that personnel may change from time to time with approval from the Gloucester Office of Emergency Management.

4. WORKERS' COMPENSATION

Each participating agency shall be responsible for injuries or death of its own personnel. Each agency will maintain workers' compensation insurance coverage, covering its own personnel while they are performing as a member of the Team. Each party waives the right to sue any other party for any workers' compensation benefits paid to its own employee or their dependants, even if the injuries were caused wholly or partially by the negligence of any other party or its officers, employees or volunteers.

5. **COMPENSATION**

Each participating agency will be responsible for all salary and benefits paid or owing to personnel it sends. The County will reimburse any participating agency for overtime compensation paid to any member of the Team active in a hazardous materials response.

6. **COORDINATION**

The Gloucester County Office of Emergency Response shall be responsible for coordinating the efforts of the participating agencies and shall have final authority in personnel decisions.

7. **EFFECTIVE DATE**

The Gloucester County Board of Chosen Freeholders approved a resolution on July 9, 2003 authorizing the creation of the Team under the direction of the Gloucester County Office of Emergency Management. This Agreement shall become effective as of the signing by the appropriate authorities.

8. **EXECUTION**

Each party hereto has read, agreed to and executed this agreement on the date indicated.

Dated this _____ day of _____, 2012 _____
J. Thomas Butts, Director Gloucester County
Office of Emergency Response

Dated this _____ day of _____, 2012 _____

Serious Penalty Calculation - (rev-04/01/2012)

Gloucester County CBRNE Team

1200 North Delsea Drive

Clayton, NJ 08312

Inspection: 316609908

Citation 1, Item 1s

Gravity Based Penalty:

Severity:	High	Death, injuries resulting in permanent disability; or chronic, irreversible illnesses
Probability:	Greater	Likelihood of injury or illness is great
High/Greater	\$7,000	

Adjustment Factors:

Size (SF):	0.40	1 to 25 employees
Good Faith (GFF):	1.00	No-reduction given if there is no safety and health program or where a willful violation is found
History (HF):	1.00	No reduction shall be given to employers who have no PEOSH inspection history in the past five years, or for employers who have been cited by PEOSH for any serious citation other than a High/Greater gravity based penalty in the past five years.

Penalty:

Per diem Penalty:	\$2,800
Abatement Date:	6/17/13
Total Accrual (Days):	-53
Accrued Penalty to Date:	-\$148,400

This penalty was arrived at using the PEOSH Procedure for Enforcement. This gravity based penalty was derived using the following formula: $((GBP \times HF) \times GFF) \times SF = \$Penalty/day$

Note Minimum Penalty is \$500/day

DOH1990

**New Jersey Department of Health and Senior Services
PEOSH Program**

OSHA 1B Form (Worksheet)

CSHO	C4835	Inspection #	316609908	Date of Inspection	01/15/2013
Employer Name	Gloucester County CBRNE Team				
Employee Name	** PII **			Occupation	Hazmat Technician
Employee Address	** PII **				
Employee City	** PII **			Employee State	NJ
Employee Zip	** PII **		Employee Phone #	** PII **	
Total # Employees	23	Total Duration	4 hours per day	Frequency	5 days per month
Standard	29 CFR 1910.120(f)(3)(i)(B)			# of Instances of the Violation	1
Type of Violation	Serious	Citation #	1	Item #	2s
				Abatement Period (# of calendar days or date abatement due)	30 Days

Description of Citation(s)

LOCATION: Facility Wide

DESCRIPTION: The Gloucester County CBRNE Team, did not offer an annual medical examination and consultation to employees that are required to perform the duties of a hazardous materials technician. The annual medical examinations being provided by the employer, as well as those being accepted by the employer from contributing agencies, only approve employees for respirator use and do not meet the requirements for a hazardous materials technician.

Directly from CPL 02-02-073, Inspection Procedures for 29 CFR 1910.120 and 1926.65, Paragraph (q): Emergency Response to Hazardous Substance Releases, The medical questionnaire for 1910.134 will not satisfy the HAZWOPER requirement for medical surveillance. The intent and the requirements for medical surveillance under HAZWOPER are much different than those required by the Respiratory Protection standard. The intent of the HAZWOPER medical surveillance requirements is two-fold: (1) to determine fitness-for-duty, including the ability to work while wearing PPE (e.g., respirators), and (2) to establish baseline data for comparison with future medical data.)

[29 CFR 1910.120(q)(9)(i), which pertains to employees performing emergency response to hazardous substances release, states members of an organized and designated HAZMAT team and hazardous materials specialist shall receive medical surveillance as required in paragraph (f) of this section.]

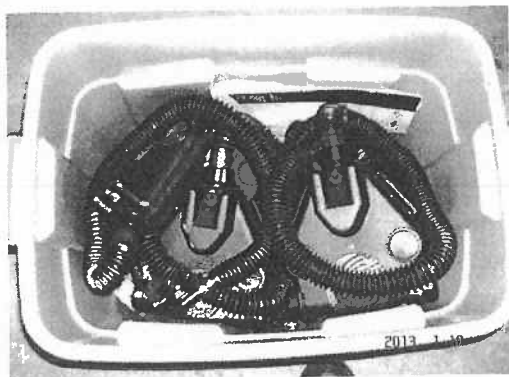
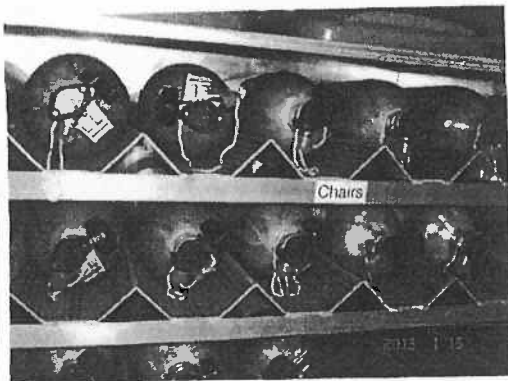
HAZARD: Members of an organized and designated HAZMAT team and hazardous materials specialists were not offered a medical surveillance physical examination at least once every twelve months for each employee covered unless the attending physician believes a longer interval (not greater than biennially) is appropriate.

EMPLOYER EXPOSURE: On or about January 15, 2013, the Gloucester County CBRNE Team consisted of 23 employees performing public safety and first responder job responsibilities of hazardous materials technicians. For calendar year 2012, the Gloucester County CBRNE Team responded to 61 incidents or calls for mutual aid that matched the criteria listed in Operational Guideline 2803, titled *Team Response to HAZMAT or WMD Incidents*. First responders trained in hazardous materials operations are provided by the Woodbury Fire Department as supplemental CBRNE Team members to perform DECON for the technician level employees.

On November 30, 2012, 15 hazardous materials technicians from the Gloucester County CBRNE Team, assisted by 9 members of the Washington Township Fire District for DECON purposes, responded to a train bridge derailment. During the accident, one of six derailed train cars, which contained 176,000-gallons of vinyl chloride, was breached releasing vinyl chloride into the air and water. Vinyl Chloride has a permissible exposure limit (PEL) of 1 part per million (ppm) with an action level of 0.5 ppm. Additionally, no employee may be exposed to vinyl chloride at concentrations greater than 5 ppm averaged over any period not exceeding 15 minutes (STEL or short-term exposure limit). During the incident, the hazardous materials technicians were stationed and operating within the "hot zone" as identified by the incident commander. No respiratory protection was used; although, air monitoring for vinyl chloride detected levels above the PEL, STEL and action level.

EMPLOYER KNOWLEDGE: During the opening conference, Hazmat Chief Jack DeAngelo provided a copy of the Gloucester County CBRNE Team's operational guidelines. Operational Guideline 2817, titled *Hazardous Materials Technician Medical Screening*, states "a bi-annual physical shall be conducted to identify changes in health and possible exposures to hazardous materials over the previous 24 months". Chief DeAngelo was informed by the CSHO, per regulations, CBRNE members shall be offered a physical every 12 months unless a licensed medical professional determines a longer interval is appropriate. The employer was unable to provide documentation from their medical provider that only a bi-annual Hazmat physical was medically necessary. According to Chief DeAngelo, "Gloucester County provides annual medical evaluations to its employees and will accept medical evaluations from contributing entities, such as the Washington Township Fire Department that conducts annual physicals, as long as those evaluations meet their requirements". If a contributing entity's medical evaluation do not meet their requirements, Chief DeAngelo stated "Gloucester County would be responsible for providing the correct medical evaluation and has done so for several members". Additionally, per the *Gloucester County Hazardous Material Team Interlocal Agreement*, the Gloucester County Office of Emergency Response shall be responsible for the coordinating the efforts of the participating agencies and shall have final authority in personnel decisions; therefore, personnel not meeting their requirements would be denied membership on the CBRNE team.

The CSHO was also provided with a copy of the Gloucester County CBRNE Team's written Respiratory Protection Program, which outlines the requirements for a medical evaluation and a questionnaire be completed prior to approval for respirator use. The annual physician opinion letters provided by Chief DeAngelo during the inspection clearly state the referenced employee has been approved for respiratory use but has not successfully completed a Hazmat physical that year. The documentation being accepted by the employer, which is supplied by the occupational medical provider, Interstate Mobile Care of Sewell, New Jersey, has unchecked boxes for Hazmat physicals adjacent to the box approving respirator use.



OPERATIONAL GUIDELINE

Division:	Operations	OG 2817 HAZARDOUS MATERIALS TECHNICIAN MEDICAL SCREENING
Section:	HazMat	
Effective Date:	04/01/04	
Revision Date:	03/02/09	

GENERAL INFORMATION (SUMMARY)

This procedure shall apply to all CBRNE HazMat Team members in order to establish the guidelines for medical screening by a physician including the frequency, types, and scope of said examinations (as required in CFR 29 1910.120).

This Operational Guideline applies to all Members of the CBRNE Team responding to and during emergency incidents. All Members will be familiar with the requirements outlined in this OG.

POLICY

A. Medical Record

1. Federal law requires records of all HazMat examinations to be kept for 30 years after the employee leaves employment.
2. Employees are encouraged to maintain personal exposure records.

B. Medical Opinions

1. Each physical performed requires (in accordance with federal law) a written medical opinion including, but not limited to, the physician's opinion about:
 - a. If the employee has detectable medical conditions that may impair or increase the risk to the employee's health in responding to HazMat scenes and/or using respirators.
 - b. Employee physical limitations.
 - c. Results of the exam and tests.

- d. A statement that the team member has been appraised of the examination results.
2. Employees shall be provided at no cost, upon request, with a copy of the medical opinion based upon the examination.

C. Assignment, Annual and Transfer Medical Examinations

1. Team members shall receive complete physical examinations bi-annually.
2. Prior to assignment to the CBRNE Team, new members shall undergo a physical examination to identify possible pre-existing medical problems and to detect "baseline" measurements to identify changes over a period of time.
3. A bi-annual physical shall be conducted to identify changes in health and possible exposures to hazardous materials over the previous 24 months.
4. A physical shall also be conducted when any member leaves the team. The results of this examination shall be used to identify both general health and the effects of exposure to various chemicals over the tenure of his/her assignment in the CBRNE Unit. This shall not be required if a complete hazardous materials physical has been conducted within the previous three months.
5. In accordance with federal law, the content of this physical is to be determined by the physician. The tests conducted may include, but not be limited to:
 - a. Physical examination
 - b. Cardiopulmonary evaluation
 - c. Condition that increase susceptibility to injury and/or illness or that would impair work
 - d. Conditions that would affect respirator use
 - e. Relevant x-rays
 - f. Blood work
 - g. Urinalysis

D. Post-Exposure Examinations

- ~~1. A medical examination shall be required if a CBRNE Team member is exposed to a hazardous material and exhibits signs and symptoms specific to the product(s) involved (or any un-attributable sign or symptom) and/or if he/she has any unidentifiable medical problem on an incident.~~
2. The post-exposure examinations shall also be required if a team member has been exposed to levels above the permissible exposure limits or published

exposure levels for emergency situations whether or not there is an obvious injury/medical problem.

3. A post-exposure examination shall also be required in the event of Personal Protective Equipment failure in the Hot Zone or during Decon.
4. Post-exposure examinations may also be conducted for other incidents. This determination shall be made by the CBRNE team Safety Officer on a case-by-case basis.
5. The content of this examination shall be at the discretion of the physician depending upon the known and/or suspected products involved.

E. Special Examinations

1. The attending physician may require more frequent medical examinations if he/she determines that an increased frequency of examinations is medically necessary.
 2. These examinations shall consist of tests as determined by the physician.
 3. Operational members trained in the use of chemical protective clothing shall receive bi-annual CBRNE physicals.
-

GLOUCESTER COUNTY HAZARDOUS MATERIAL TEAM INTERLOCAL AGREEMENT

WHEREAS, the Gloucester County Board of Chosen Freeholders (the County) has created a Hazardous Material Team (the Team) for the purpose of containing actual or potential leaks or spills of hazardous substances; and

WHEREAS, it is the desire of various agencies, both public and private in Gloucester County to participate to supply manpower in this endeavor; and

WHEREAS, N.J.S.A. 40:8A-1 et seq., the New Jersey Interlocal Services Act, provides that local units government, including counties may enter into agreement for joint and/or reciprocal services.

NOW, THEREFORE, IT IS AGREED AS FOLLOWS:

1. SCOPE OF SERVICES

GENERAL

This hazardous materials team is an organized unit who is expected to handle and control actual or potential leaks or spills of hazardous substances possibly requiring immediate proximity to the substance. The Team members perform responses to releases or potential releases of hazardous substances for the purpose of control and stabilization of the incident.

PERSONNEL

The following are identified as an additional member of the team:

2. EQUIPMENT

Gloucester County agrees to provide all equipment necessary for the Team to perform consistent with the aforesaid purpose.

3. TERM

This agreement shall be perpetual except that personnel may change from time to time with approval from the Gloucester Office of Emergency Management.

4. WORKERS' COMPENSATION

Each participating agency shall be responsible for injuries or death of its own personnel. Each agency will maintain workers' compensation insurance coverage, covering its own personnel while they are performing as a member of the Team. Each party waives the right to sue any other party for any workers' compensation benefits paid to its own employee or their dependants, even if the injuries were caused wholly or partially by the negligence of any other party or its officers, employees or volunteers.

5. **COMPENSATION**

Each participating agency will be responsible for all salary and benefits paid or owing to personnel it sends. The County will reimburse any participating agency for overtime compensation paid to any member of the Team active in a hazardous materials response.

6. **COORDINATION**

The Gloucester County Office of Emergency Response shall be responsible for coordinating the efforts of the participating agencies and shall have final authority in personnel decisions.

7. **EFFECTIVE DATE**

The Gloucester County Board of Chosen Freeholders approved a resolution on July 9, 2003 authorizing the creation of the Team under the direction of the Gloucester County Office of Emergency Management. This Agreement shall become effective as of the signing by the appropriate authorities.

8. **EXECUTION**

Each party hereto has read, agreed to and executed this agreement on the date indicated.

Dated this _____ day of _____, 2012 _____
J. Thomas Butts, Director Gloucester County
Office of Emergency Response

Dated this _____ day of _____, 2012 _____

Serious Penalty Calculation - (rev-04/01/2012)

Gloucester County CBRNE Team

1200 North Delsea Drive

Clayton, NJ 08312

Inspection: 316609908

Citation 1, Item 2s

Gravity Based Penalty:

Severity:	High	Death, injuries resulting in permanent disability; or chronic, irreversible illnesses
Probability:	Greater	Likelihood of injury or illness is great
High/Greater	\$7,000	

Adjustment Factors:

Size (SF):	0.40	1 to 25 employees
Good Faith (GFF):	1.00	No-reduction given if there is no safety and health program or where a willful violation is found
History (HF):	1.00	No reduction shall be given to employers who have no PEOSH inspection history in the past five years, or for employers who have been cited by PEOSH for any serious citation other than a High/Greater gravity based penalty in the past five years.

Penalty:

Per diem Penalty:	\$2,800
Abatement Date:	6/17/13
Total Accrual (Days):	-53
Accrued Penalty to Date:	-\$148,400

This penalty was arrived at using the PEOSH Procedure for Enforcement. This gravity based penalty was derived using the following formula: $((GBP \times HF) \times GFF) \times SF = \$Penalty/day$

Note Minimum Penalty is \$500/day

**New Jersey Department of Health and Senior Services
PEOSH Program**

OSHA 1B Form (Worksheet)

CSHO	C4835	Inspection #	316609908	Date of Inspection	01/15/2013
Employer Name	Gloucester County CBRNE Team				
Employee Name	** PII **		Occupation	Hazmat Technician	
Employee Address	** PII **				
Employee City	** PII **			Employee State	NJ
Employee Zip	** PII **		Employee Phone #	** PII **	
Total # Employees	8	Total Duration	4 hours per day	Frequency	5 days per month
Standard	29 CFR 1910.120(f)(3)(i)(C)			# of Instances of the Violation	1
Type of Violation	Serious	Citation #	1	Item #	3s
				Abatement Period (# of calendar days or date abatement due)	30 Days

Description of Citation(s)

LOCATION: Facility Wide

DESCRIPTION: The Gloucester County CBRNE Team, did not offer an exit medical examination and consultation to employees that are required to perform the duties of a hazardous materials technician upon their termination from the team. Shortly after the Paulsboro train derailment HAZMAT spill on November 30, 2012, eight (8) technician-level trained members from the Washington Township Fire District resigned from the CBRNE team at the fire district's public meeting on December 6, 2012.

[29 CFR 1910.120(q)(9)(i), which pertains to employees performing emergency response to hazardous substances release, states members of members of an organized and designated HAZMAT team and hazardous materials specialist shall receive medical surveillance as required in paragraph (f) of this section.]

HAZARD: Members of an organized and designated HAZMAT team and hazardous materials specialists were not offered a medical examination and consultation upon termination of employment.

EMPLOYEE EXPOSURE: On November 30, 2012, 15 hazardous materials technicians from the Gloucester County CBRNE Team, assisted by 9 members of the Washington Township Fire District for DECON purposes, responded to a train bridge derailment. During the accident, one of six derailed train cars, which contained 176,000-gallons of vinyl chloride, was breached releasing vinyl chloride into the air and water. Vinyl Chloride has a permissible exposure limit (PEL) of 1part per million (ppm) with an action level of 0.5 ppm. Additionally, no employee may be exposed to vinyl chloride at concentrations greater than 5 ppm averaged over any period not exceeding 15 minutes (STEL or short-term exposure limit). During the incident, the hazardous materials technicians were stationed and operating within the "hot zone" as identified by the incident commander. No respiratory

protection was used; although, air monitoring for vinyl chloride detected levels above the PEL, STEL and action level.

Due to the operational circumstances of the Paulsboro train derailment, eight (8) technician-level trained members from the Washington Township Fire District, including five (5) individuals who responded to the incident, resigned from the team at the fire district's public meeting on December 6, 2012. These hazardous materials technicians were a part of the Gloucester County CBRNE Team that responded to 61 incidents or calls for mutual aid in calendar year 2012, that matched the criteria listed in Operational Guideline 2803, titled *Team Response to HAZMAT or WMD Incidents*.

EMPLOYER KNOWLEDGE: During the opening conference, Hazmat Chief Jack DeAngelo provided a copy of the Gloucester County CBRNE Team's operational guidelines. Operational Guideline 2817, titled *Hazardous Materials Technician Medical Screening*, states "a physical shall also be conducted when any member leaves the team with the results of this examination to be used to identify effects to exposures to over the tenure of the employees assignment to the CBRNE unit." According to Chief DeAngelo, "Gloucester County provides the medical evaluations to its employees and will accept medical evaluations from contributing entities, such as the Washington Township Fire District, as long as those evaluations meet their requirements". If a contributing entity's medical evaluation do not meet their requirements, Chief DeAngelo stated "Gloucester County would be responsible for providing the correct medical evaluation and has done so for several members".

The Washington Township Fire District held a public meeting on December 6, 2012, where the fire district withdrew from the Gloucester County HAZMAT and DECON teams. Mr. Sam Micklus, Chairman of the Washington Township Fire District, provided a copy of Resolution 8-2013 that formally memorializes their decision to withdraw from participating with the CBRNE team. On December 10, 2012, Washington Township Fire Chief Everett Hoffman notified the members of the Gloucester County Fire Chiefs and Fire Officers Association of the resignations.

OPERATIONAL GUIDELINE

Division:	Operations	OG 2817 HAZARDOUS MATERIALS TECHNICIAN MEDICAL SCREENING
Section:	HazMat	
Effective Date:	04/01/04	
Revision Date:	03/02/09	

GENERAL INFORMATION (SUMMARY)

This procedure shall apply to all CBRNE HazMat Team members in order to establish the guidelines for medical screening by a physician including the frequency, types, and scope of said examinations (as required in CFR 29 1910.120).

This Operational Guideline applies to all Members of the CBRNE Team responding to and during emergency incidents. All Members will be familiar with the requirements outlined in this OG.

POLICY

A. Medical Record

1. Federal law requires records of all HazMat examinations to be kept for 30 years after the employee leaves employment.
2. Employees are encouraged to maintain personal exposure records.

B. Medical Opinions

1. Each physical performed requires (in accordance with federal law) a written medical opinion including, but not limited to, the physician's opinion about:
 - a. If the employee has detectable medical conditions that may impair or increase the risk to the employee's health in responding to HazMat scenes and/or using respirators.
 - b. Employee physical limitations.
 - c. Results of the exam and tests.

- d. A statement that the team member has been appraised of the examination results.
2. Employees shall be provided at no cost, upon request, with a copy of the medical opinion based upon the examination.

C. **Assignment, Annual and Transfer Medical Examinations**

1. Team members shall receive complete physical examinations bi-annually.
2. Prior to assignment to the CBRNE Team, new members shall undergo a physical examination to identify possible pre-existing medical problems and to detect "baseline" measurements to identify changes over a period of time.
3. A bi-annual physical shall be conducted to identify changes in health and possible exposures to hazardous materials over the previous 24 months.
4. A physical shall also be conducted when any member leaves the team. The results of this examination shall be used to identify both general health and the effects of exposure to various chemicals over the tenure of his/her assignment in the CBRNE Unit. This shall not be required if a complete hazardous materials physical has been conducted within the previous three months.
5. In accordance with federal law, the content of this physical is to be determined by the physician. The tests conducted may include, but not be limited to:
 - a. Physical examination
 - b. Cardiopulmonary evaluation
 - c. Condition that increase susceptibility to injury and/or illness or that would impair work
 - d. Conditions that would affect respirator use
 - e. Relevant x-rays
 - f. Blood work
 - g. Urinalysis

D. **Post-Exposure Examinations**

1. A medical examination shall be required if a CBRNE Team member is exposed to a hazardous material and exhibits signs and symptoms specific to the product(s) involved (or any un-attributable sign or symptom) and/or if he/she has any unidentifiable medical problem on an incident.
2. The post-exposure examinations shall also be required if a team member has been exposed to levels above the permissible exposure limits or published

exposure levels for emergency situations whether or not there is an obvious injury/medical problem.

3. A post-exposure examination shall also be required in the event of Personal Protective Equipment failure in the Hot Zone or during Decon.
4. Post-exposure examinations may also be conducted for other incidents. This determination shall be made by the CBRNE team Safety Officer on a case-by-case basis.
5. The content of this examination shall be at the discretion of the physician depending upon the known and/or suspected products involved.

E. **Special Examinations**

1. The attending physician may require more frequent medical examinations if he/she determines that an increased frequency of examinations is medically necessary.
2. These examinations shall consist of tests as determined by the physician.
3. Operational members trained in the use of chemical protective clothing shall receive bi-annual CBRNE physicals.

MINUTES

PUBLIC MEETING

Washington Township Fire District

The December 6, 2012 Public Meeting of the Washington Township Board of Fire Commissioners was called to order at 7:30 PM by Chairman, Sam Micklus.

ATTENDANCE:

**Sam Micklus- present
Mike Vinci- not present
Frank Stella-present
Larry Kennie- present
Ed Etschman- present
Jerry Lonabaugh- present
John Hoffman- present
Toni Stone- present**

REGULAR ORDER OF BUSINESS

The minutes of the November 15, 2012 Work Session were reviewed. Motion to approve the minutes was made by Ed Etschman and second by Larry Kennie. The motion was approved by a vote of 4-0.

The minutes of the November 1 and 15, 2012 Executive Session were reviewed. Motion to approve was made by Ed Estchman and second by Frank Stella. Vote 4-0

Resolutions:

**Resolution 52-2012 Awarding bid for purchase of ladder tower 1016.
Motion made by Ed Etschman and second by Frank Stella. Vote 4-0.**

**Resolution 53-2012 Transfer of Excess Funds
Motion with one change was made by Ed Estchman and second by Frank Stella.
Vote 4-0.**

**Resolution 55-2012 Authorizing sale of pickup truck 1071.
Motion made by Ed Etschman and second by Frank Stella. Vote 4-0.**

**Resolution 56-2012 Approving the 2013 fire district budget.
Motion was made by Frank Stella and second by Ed Etschman. Vote 4-0.**

Correspondence:

A thank you letter was received from the Toni Donato foundation thanking the fire district for the funds raised during the football game on 11-18-12 with Deptford Fire District.

Treasurer's Report:

December 3, 2012 Received the Supplemental Fire Service Grant (SFSG) in the amount of \$16,419.00.

Motion to pay the bills was made by Ed Etschman and second by Larry Kennie.
Vote 4-0.

Chief's Report: read by John Hoffman.

Training Report: read by Sam Micklus.

Fire Prevention/Investigation: monthly report for the Bureau of Fire Prevention was read by Ed Etschman.

Insurance:

Toni Stone reminded everyone that the HRA enrollment forms were due back on 12-5-12 and those who have not turned them in should do so immediately.

Ed Etschman said it is the member's responsibility to turn them in or they may not receive their 2013 allotment for their account.

Equipment:

Sam Micklus asked that officers tell all former members who did not return fire district equipment that was issued to them be asked to do so.

John Hoffman said that new pagers have been ordered.

Policies and Procedures:

Light duty and discipline policies are being drafted.

Truck Maintenance: report read by Ed Etschman.

Old Business:

Frank Stella gave an update on the new equipment that has been installed for the firewall/security called Watchguard. Certain restrictions have also been put in place for access to websites but anyone can use their own personal devices on WiFi. If access is needed for a business reason, please notify Frank Stella.

John Hoffman gave an update on the FEMA meeting that took place this week for Hurricane Sandy expenses incurred by the fire district.

The Chiefs met on 11-29-12 with a consensus on the new reorganization plan and policy. A new power point presentation is being prepared with the changes that were discussed. Sam Micklus asked that it also include the non-union employees.

Larry Kennie said that the old 10-1 sub station site plan was approved and the sale will move along by the end of this year or the beginning of next year. Sam Micklus made a motion to designate Larry Kennie to sign documents for the sale. Second by Ed Etschman. Vote 3-0 with one abstaining.

New Business:

John Hoffman said the bill for residential fire sprinklers will be passed by the Assembly on 12-17-12 and then will proceed to the Senate.

Audience Participation:

Rich Sumek, 10-2, requested a closed meeting with the Board after the meeting and it was granted.

Tony Greco, 10-2, asked about follow up on the status of the retired members. The tasks considered so far are emergency management staffing, canteen and rehab services and photography as an auxiliary. Getting on a truck will create legal and liability problems for the district. The Board will get back to him at the January public meeting.

Jim Demore, 10-3, thanked everyone for their help with the fund raiser at Ott's on the Green for Hurricane Sandy. The funds raised will total around \$3500. Jim was thanked by the Board and applauded by the audience.

Joe Mason, 10-1, thanked the Board for awarding the bid for the new ladder truck.

Resolution 54-2012 Executive Session to discuss employee staffing and safety issues (Sumek).

Motion to adjourn to Executive Session at 8:20 PM was made by Ed Etschman and second by Frank Stella. Vote 4-0.

The Board reconvened the public meeting at 9:25 PM. Ed Etschman made a motion that the Washington Township Fire District withdraw from the Gloucester County Hazmat and Decon Teams and second by Larry Kennie. Vote 4-0.

Motion to adjourn the meeting was made by Ed Etschman and second by Larry Kennie. Vote 4-0. Meeting adjourned at 9:30 PM.

Washington Township Board of Fire Commissioners

Submitted:
FS/ts

Frank Stella, Secretary

Date Accepted:

1/3/13

Attest:

**** P I I ****

**BOARD OF FIRE COMMISSIONERS OF
WASHINGTON TOWNSHIP FIRE DISTRICT NO. 1
GLOUCESTER COUNTY, NEW JERSEY**

RESOLUTION 8-2013

**RESOLUTION WITHDRAWING THE WASHINGTON TOWNSHIP FIRE DISTRICT FROM THE
GLOUCESTER COUNTY HAZARDOUS MATERIALS AND DECONTAMINATION TEAMS**

WHEREAS, the Board of Fire Commissioners of the Washington Township Fire District No. 1, Gloucester County, New Jersey wish to publically affirm the withdrawal of the Washington Township Fire District from the Gloucester County Hazardous Materials and Decontamination teams; and

WHEREAS, the Washington Township Board of Fire Commissioners made its decision based upon a presentation to it by members of the County team who responded to the catastrophe in Paulsboro on November 30, 2012; and

WHEREAS, those emergency responders were unnecessarily exposed to toxic gases in part due to the negligence of the county by its failure to maintain the equipment required to detect exposure; and

WHEREAS, these individuals can never know how much and for how long they were exposed to Vinyl Chloride, and

WHEREAS, this incident was the culmination of an ongoing lackadaisical commitment to HAZMAT and DECON at the county level; and

WHEREAS, these individuals withdrew from the team and made a request to the Washington Township Board of Fire Commissioners to formally withdraw from the county teams; and

WHEREAS, Chairman, Samuel Micklus, corresponded with the Gloucester County Emergency Response Center advising same that the Washington Township Board of Fire Commissioners voted to withdraw the Washington Township Fire District from the Gloucester County Hazardous Materials and Decontamination teams.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Fire Commissioners of Washington Township, Gloucester County, New Jersey, hereby affirms and memorialize the withdrawal of the Washington Township Fire District from the Gloucester County Hazardous Materials and Decontamination teams.

BE IT FURTHER RESOLVED that this Resolution shall take effect immediately.

ATTEST:

**** PII ****

Secretary

DATE:

1/3/13

Washington Township Board of Fire Commissioners

**** PII ****

Samuel W. Micklus, Chairman



WASHINGTON TOWNSHIP FIRE DISTRICT
TOWNSHIP OF WASHINGTON
GLOUCESTER COUNTY, NEW JERSEY

Board of Fire Commissioners
P.O. Box 653
Turnersville, N.J. 08012-0653

DISTRICT OFFICE
(856) 863-4000
FAX: (856) 589-0239

EMERGENCY
9-1-1

December 10, 2012

To the members of the Gloucester County Fire Chiefs and Fire Officers Association,

It is with regret that despite the many warnings of disrepair and lack of preparation signaled to the county, recent events led the Washington Township Board of Fire Commissioners (BOFC) to order the withdraw of all of its firefighters from participating in the Gloucester County CBRNE (HAZMAT) Team and from providing technical DECON to Gloucester County. This order became effective at 2130 hours on December 6, 2012 and does not reflect on the support from many fire departments around Gloucester County. Notification was made to the Gloucester County Emergency Response Center supervisor with a request to notify the appropriate chain of command. A confirmation that the higher chain of command had been notified was forwarded from the center at 2159 hours.

The Washington Township BOFC reached its decision after being presented with testimony from both HAZMAT team members and DECON team members who responded to Paulsboro on 11/30 as part of the HAZMAT and DECON teams. With one of the most complex HAZMAT incidents on the East Coast in more than a decade occurring within Gloucester County, team members from our fire department serving as HAZMAT technicians and as the DECON team were abandoned by supervisory HAZMAT personnel employed by the county and were left with equipment on CBRNE 1 which was inoperable and out of service.

Due in no small part to the multiple pieces of monitoring devices that were inoperable, our firefighters were unnecessarily exposed to highly toxic Vinyl Chloride gas, a known carcinogen. Without the tools necessary to affect a proper response and to provide vital technical information, not only were other emergency workers unnecessarily exposed but so was the general public in the first few hours when local and county resources were the primary responders.

Over the past several years, our department has reported to the county agents responsible for HAZMAT and DECON, numerous failures with equipment, training, procedures, and leadership to no avail. The failure to implement corrective action has left our fire department no choice but to withdraw from participating in county HAZMAT related activities to avoid causing further harm to our firefighters.

The Washington Township Fire Department has and will continue to share our resources with our neighboring fire departments throughout Gloucester County in the form of

training, fire prevention, rescue, technical rescue, or general firefighting mutual aid by providing whatever capabilities we have at our disposal and can afford to send. We further welcome reciprocal mutual aid when and where it is available. We will continue to support the Gloucester County Fire Chiefs and Fire Officers Association in its mission and for the betterment of public fire protection in our own jurisdiction and throughout Gloucester County. We will consider future participation in HAZMAT response in Gloucester County if and when there is significant change in the leadership and observable change in the operations of the CBRNE (HAZMAT) Team.

Submitted,


** PII **

Everett John Hoffman
Fire Chief

Cc: BOFC
Mayor Barbara Wallace
file

GLOUCESTER COUNTY HAZARDOUS MATERIAL TEAM INTERLOCAL AGREEMENT

WHEREAS, the Gloucester County Board of Chosen Freeholders (the County) has created a Hazardous Material Team (the Team) for the purpose of containing actual or potential leaks or spills of hazardous substances; and

WHEREAS, it is the desire of various agencies, both public and private in Gloucester County to participate to supply manpower in this endeavor; and

WHEREAS, N.J.S.A. 40:8A-1 et seq., the New Jersey Interlocal Services Act, provides that local units government, including counties may enter into agreement for joint and/or reciprocal services.

NOW, THEREFORE, IT IS AGREED AS FOLLOWS:

1. SCOPE OF SERVICES

GENERAL

This hazardous materials team is an organized unit who is expected to handle and control actual or potential leaks or spills of hazardous substances possibly requiring immediate proximity to the substance. The Team members perform responses to releases or potential releases of hazardous substances for the purpose of control and stabilization of the incident.

PERSONNEL

The following are identified as an additional member of the team:

2. EQUIPMENT

Gloucester County agrees to provide all equipment necessary for the Team to perform consistent with the aforesaid purpose.

3. TERM

This agreement shall be perpetual except that personnel may change from time to time with approval from the Gloucester Office of Emergency Management.

4. WORKERS' COMPENSATION

Each participating agency shall be responsible for injuries or death of its own personnel. Each agency will maintain workers' compensation insurance coverage, covering its own personnel while they are performing as a member of the Team. Each party waives the right to sue any other party for any workers' compensation benefits paid to its own employee or their dependants, even if the injuries were caused wholly or partially by the negligence of any other party or its officers, employees or volunteers.

5. **COMPENSATION**

Each participating agency will be responsible for all salary and benefits paid or owing to personnel it sends. The County will reimburse any participating agency for overtime compensation paid to any member of the Team active in a hazardous materials response.

6. **COORDINATION**

The Gloucester County Office of Emergency Response shall be responsible for coordinating the efforts of the participating agencies and shall have final authority in personnel decisions.

7. **EFFECTIVE DATE**

The Gloucester County Board of Chosen Freeholders approved a resolution on July 9, 2003 authorizing the creation of the Team under the direction of the Gloucester County Office of Emergency Management. This Agreement shall become effective as of the signing by the appropriate authorities.

8. **EXECUTION**

Each party hereto has read, agreed to and executed this agreement on the date indicated.

Dated this _____ day of _____, 2012 _____
J. Thomas Butts, Director Gloucester County
Office of Emergency Response

Dated this _____ day of _____, 2012 _____

Serious Penalty Calculation - (rev-04/01/2012)

Gloucester County CBRNE Team

1200 North Delsea Drive

Clayton, NJ 08312

Inspection: 316609908

Citation 1, Item 3s

Gravity Based Penalty:

Severity:	High	Death, injuries resulting in permanent disability; or chronic, irreversible illnesses
Probability:	Greater	Likelihood of injury or illness is great
High/Greater	\$7,000	

Adjustment Factors:

Size (SF):	0.40	1 to 25 employees
Good Faith (GFF):	1.00	No-reduction given if there is no safety and health program or where a willful violation is found
History (HF):	1.00	No reduction shall be given to employers who have no PEOSH inspection history in the past five years, or for employers who have been cited by PEOSH for any serious citation other than a High/Greater gravity based penalty in the past five years.

Penalty:

Per diem Penalty:	\$2,800
Abatement Date:	6/17/13
Total Accrual (Days):	-53
Accrued Penalty to Date:	-\$148,400

This penalty was arrived at using the PEOSH Procedure for Enforcement. This gravity based penalty was derived using the following formula: $((GBP \times HF) \times GFF) \times SF = \$Penalty/day$

Note Minimum Penalty is \$500/day

DOH2016

**New Jersey Department of Health and Senior Services
PEOSH Program**

OSHA 1B Form (Worksheet)

CSHO	C4835	Inspection #	316609908	Date of Inspection	01/15/2013
Employer Name	Gloucester County CBRNE Team				
Employee Name	** PII **			Occupation	Hazmat Technician
Employee Address	** PII **				
Employee City	** PII **			Employee State	NJ
Employee Zip	** PII **		Employee Phone #	** PII **	
Total # Employees	15	Total Duration	12 hours	Frequency	1 Day
Standard	29 CFR 1910.120(f)(3)(i)(D)			# of Instances of the Violation	1
Type of Violation	Serious	Citation #	1	Item #	4s
				Abatement Period (# of calendar days or date abatement due)	30 Days

Description of Citation(s)

LOCATION: Facility Wide

DESCRIPTION: The Gloucester County CBRNE Team did not offer a medical examination and consultation to employees that were exposed above the permissible exposure limits while performing their duties as a hazardous materials technician during an emergency response to a hazardous substances release. On November 30, 2012, 15 hazardous materials technicians from the Gloucester County CBRNE Team responded to a train bridge derailment in Paulsboro, New Jersey, that resulted in exposure to vinyl chloride above the permissible exposure limit.

[29 CFR 1910.120(q)(9)(i), which pertains to employees performing emergency response to hazardous substances release, states members of members of an organized and designated HAZMAT team and hazardous materials specialist shall receive medical surveillance as required in paragraph (f) of this section.]

HAZARD: Members of an organized and designated HAZMAT team and hazardous materials specialists were not offered a medical examination and consultation as soon as possible upon notification by an employee that the employee has developed signs or symptoms indicating possible overexposure to hazardous substances or health hazards, or that the employee has been injured or exposed above the permissible exposure limits or published exposure levels in an emergency situation.

EMPLOYEE EXPOSURE: On November 30, 2012, 15 hazardous materials technicians from the Gloucester County CBRNE Team, assisted by 9 members of the Washington Township Fire District for DECON purposes, responded to a train bridge derailment. During the accident, one of six derailed train cars, which contained 176,000-gallons of vinyl chloride, was breached releasing vinyl chloride into the air and water. Vinyl Chloride has a permissible exposure limit (PEL) of 1part per million (ppm) with an action level of 0.5 ppm. Additionally, no

employee may be exposed to vinyl chloride at concentrations greater than 5 ppm averaged over any period not exceeding 15 minutes (STEL or short-term exposure limit).

During the incident, the hazardous materials technicians from Gloucester County CBRNE Team were stationed and operating within the "hot zone" as identified by the incident commander. No respiratory protection was used during the entire response; although, air monitoring for vinyl chloride detected levels above the PEL, STEL and action level. Several members of the team arrived in the "hot zone" at 0740 while all remaining responding members arrived by 1010 and stayed until the team was debolized at 1905. The Paulsboro Refinery HAZMAT team reported VOC concentrations at the incident scene at a maximum of 760 ppm at 0837 using MX6 iBrid photoionization detectors (PID). According to the manufacturers information, the MX6 iBrid PID has a response factor of 1.9 for vinyl chloride, which could have re-calculated the maximum to 1444 ppm. Additionally, refinery personnel also recorded uncorrected elevated PID levels during the day, for example 54 ppm at 1315 and 17.5 ppm at 1524. An outside contractor, Center for Toxicology and Environmental Health (CTEH), reported numerous results above the PEL using colorimetric detector tubes for vinyl chloride between 1339 and 2359 on November 30, 2012. Urine tests for first responders handled by CTEH had sampling results for thiodiglycolic acid, a metabolite of vinyl chloride, as high as 13 milligrams/gram (mg/g) creatinine, which translates to vinyl chloride air concentrations over 16 ppm. During the interview process, employees describe seeing vapor clouds, frost lines on the bridge and train cars, smelling "sweet" odors and hearing air monitoring personnel announce elevated levels as high as 30 ppm.

EMPLOYER KNOWLEDGE: During the opening conference, HAZMAT Chief Jack DeAngelo provided a copy of the Gloucester County CBRNE Team's operational guidelines. Operational Guideline 2817, titled *Hazardous Materials Technician Medical Screening*, states "a post-exposure examination shall also be required if a team member has been exposed to levels above the permissible exposure limits or published exposure levles for emergency situation whether or not there is an obvious injury/medical problem". According to Chief DeAngelo, "Gloucester County provides the current medical evaluations to its employees and will accept medical evaluations from contributing entities, such as Deptford Fire Department and the Washington Township Fire Department, as long as those evaluations meet their requirements". If a contributing entity's medical evaluation do not meet their requirements, Chief DeAngelo stated "Gloucester County would be responsible for providing the correct medical evaluation and has done so for several members".

Hazmat Deputy Chief Dennis Kappler of the Gloucester County CBRNE Team and Hazmat Deputy Coordinator Len Clark were later present at the incident scene on November 30, 2012. According to employee statement and Patrick Dolgos's activity form (ICS 214), all members the CBRNE team, technicians and operations levels employees, were demobished at the end of the day and all responders were notified at 1930 of the urine tests requested by Unified Command. Robert Hill, Director of the Gloucester County Fire Academy, was appointed safety office on December 4, 2012, and gave safety briefings each morning which he stated urine test are being collected for each responder to identify exposures. Chief DeAngelo was involved in the entire process after the initial resonse and gave regular updates to management personnel regarding the site activities as was aware of the urine sampling and results.

OPERATIONAL GUIDELINE

Division:	Operations	OG 2817 HAZARDOUS MATERIALS TECHNICIAN MEDICAL SCREENING
Section:	HazMat	
Effective Date:	04/01/04	
Revision Date:	03/02/09	

GENERAL INFORMATION (SUMMARY)

This procedure shall apply to all CBRNE HazMat Team members in order to establish the guidelines for medical screening by a physician including the frequency, types, and scope of said examinations (as required in CFR 29 1910.120).

This Operational Guideline applies to all Members of the CBRNE Team responding to and during emergency incidents. All Members will be familiar with the requirements outlined in this OG.

POLICY

A. Medical Record

1. Federal law requires records of all HazMat examinations to be kept for 30 years after the employee leaves employment.
2. Employees are encouraged to maintain personal exposure records.

B. Medical Opinions

1. Each physical performed requires (in accordance with federal law) a written medical opinion including, but not limited to, the physician's opinion about:
 - a. If the employee has detectable medical conditions that may impair or increase the risk to the employee's health in responding to HazMat scenes and/or using respirators.
 - b. Employee physical limitations.
 - c. Results of the exam and tests.

- d. A statement that the team member has been appraised of the examination results.
2. Employees shall be provided at no cost, upon request, with a copy of the medical opinion based upon the examination.

C. Assignment, Annual and Transfer Medical Examinations

1. Team members shall receive complete physical examinations bi-annually.
2. Prior to assignment to the CBRNE Team, new members shall undergo a physical examination to identify possible pre-existing medical problems and to detect "baseline" measurements to identify changes over a period of time.
3. A bi-annual physical shall be conducted to identify changes in health and possible exposures to hazardous materials over the previous 24 months.
4. A physical shall also be conducted when any member leaves the team. The results of this examination shall be used to identify both general health and the effects of exposure to various chemicals over the tenure of his/her assignment in the CBRNE Unit. This shall not be required if a complete hazardous materials physical has been conducted within the previous three months.
5. In accordance with federal law, the content of this physical is to be determined by the physician. The tests conducted may include, but not be limited to:
 - a. Physical examination
 - b. Cardiopulmonary evaluation
 - c. Condition that increase susceptibility to injury and/or illness or that would impair work
 - d. Conditions that would affect respirator use
 - e. Relevant x-rays
 - f. Blood work
 - g. Urinalysis

D. Post-Exposure Examinations

1. ~~A medical examination shall be required if a CBRNE Team member is exposed to a hazardous material and exhibits signs and symptoms specific to the product(s) involved (or any un-attributable sign or symptom) and/or if he/she has any unidentifiable medical problem on an incident.~~
2. The post-exposure examinations shall also be required if a team member has been exposed to levels above the permissible exposure limits or published

exposure levels for emergency situations whether or not there is an obvious injury/medical problem.

3. A post-exposure examination shall also be required in the event of Personal Protective Equipment failure in the Hot Zone or during Decon.
4. Post-exposure examinations may also be conducted for other incidents. This determination shall be made by the CBRNE team Safety Officer on a case-by-case basis.
5. The content of this examination shall be at the discretion of the physician depending upon the known and/or suspected products involved.

E. Special Examinations

1. The attending physician may require more frequent medical examinations if he/she determines that an increased frequency of examinations is medically necessary.
2. These examinations shall consist of tests as determined by the physician.
3. Operational members trained in the use of chemical protective clothing shall receive bi-annual CBRNE physicals.

Vinyl chloride		Formula: CH ₂ =CHCl	CAS#: 75-01-4	RTECS#: KU9625000	IDLH: Ca [N.D.]
Conversion: 1 ppm = 2.55 mg/m ³		DOT: 1086 116P (inhibited)			
Synonyms/Trade Names: Chloroethene, Chloroethylene, Ethylene monochloride, Monochloroethene, Monochloroethylene, VC, Vinyl chloride monomer (VCM)					
Exposure Limits: NIOSH REL: Ca See Appendix A OSHA PEL: [1910.1017] TWA 1 ppm C 5 ppm [15-minute]				Measurement Methods (see Table 1): NIOSH 1007 OSHA 4, 75	
Physical Description: Colorless gas or liquid (below 7°F) with a pleasant odor at high concentrations. [Note: Shipped as a liquefied compressed gas.]					
Chemical & Physical Properties: MW: 62.5 BP: 7°F Sol(77°F): 0.1% FLP: NA (Gas) IP: 9.99 eV RGasD: 2.21 VP: 3.3 atm FRZ: -256°F UEL: 33.0% LEL: 3.6% Flammable Gas		Personal Protection/Sanitation (see Table 2): Skin: Frostbite Eyes: Frostbite Wash skin: N.R. Remove: When wet (flamm) Change: N.R. Provide: Frostbite wash		Respirator Recommendations (see Tables 3 and 4): NIOSH *: ScbaF: Pd, Pp/ SaF: Pd, Pp/ AScba Escape: GmFS/ ScbaE See Appendix E (page 351)	
		Incompatibilities and Reactivities: Copper, oxidizers, aluminum, peroxides, iron, steel [Note: Polymerizes in air, sunlight, or heat unless stabilized by inhibitors such as phenol. Attacks iron & steel in presence of moisture.]			
Exposure Routes, Symptoms, Target Organs (see Table 5): ER: Inh, Con (liquid) SY: Lacs; abdom pain, GI bleeding; enlarged liver; pallor or cyan of extremities; liquid: frostbite; [canc] TO: Liver, CNS, blood, resp sys, lymphatic sys [liver cancer]			First Aid (see Table 6): Eye: Frostbite Skin: Frostbite Breath: Resp support		

No IDLH shown....but PEL of 1PPM ...OK wear SCBA.....MW – Heavier than air....Very flammable 3.6 – 33%, Not Soluble in water...Forget water fog for absorption – Notice the ERG Guide # 116P – P = possible polymerizer, Equal sign in Chem Formula equals polymerization potential, Note in Incompatabilities.

Compiled and prepared by Thomas
J. O'Connell



CENTER FOR TOXICOLOGY
AND ENVIRONMENTAL HEALTH, LLC

11-13 10AM

December 6, 2012

Name _____

Agency _____

Date of Collection 11/30/2012

RE: Urine testing for Thiodiglycolic Acid (TdGA)

On Friday November 30, 2012 there was a release of Vinyl Chloride from a ruptured railcar in Paulsboro, NJ. Numerous workers were exposed to potentially high air concentrations of Vinyl Chloride without respiratory protection, before air monitoring was in place.

Emergency Responders (fire, police, EMS, etc) were self-identified as being exposed, and presented to the Gloucester County Fire Marshall's office for collection of urine samples for Thiodiglycolic Acid (abbreviated TdGA), which were sent to a national laboratory (NMS Labs). TdGA is a breakdown product of vinyl chloride, it can be used to evaluate workers if they had exposures to vinyl chloride levels higher than the current workplace limits (OSHA Permissible Exposure Level or PEL). However, TdGA can also be found normally in the urine of individuals without vinyl chloride exposure. A normal concentration, as indicated by the testing laboratory, is less than 2 mg/gram creatinine.

Results:

The urine TdGA level of the individual listed above was 13 mg/g creatinine

This TdGA level is normal (not elevated)

☒ This TdGA level is elevated. As a guideline, prior occupational studies have shown that workers exposed to various levels of Vinyl Chloride had the following urine TdGA levels, when tested after several shifts of workplace exposures:

Vinyl Chloride Air Concentrations	Urine TdGA Levels (mg per 24 hours)
1 ppm (current OSHA standard)	1.8
2 ppm	2.4
4 ppm	4.5
8 ppm	8.2
16 ppm	10.6

It is important for each tested individual to discuss these results with their occupational physician who is in charge of monitoring workplace exposures and medical issues, to determine if there is any further testing recommended.

Again, we appreciate all your help. Should your Occupational Physician have any questions regarding the test results or how to interpret them, please do not hesitate to call our offices at 501-814-2834.

Sincerely,

CTEH

Paulsboro Refinery Hazardous Materials Response Team Mutual Aid
11/30/12 Personnel Involvement & Timestamp of Air Monitoring Data

Paulsboro Refinery Personnel & Involvement: 1) Incident Comment Post - Patrick Robinson, **** PII **** 2) Incident Monitoring Team **** PII **** 3) Paulsboro Refinery (PBR) Monitoring Team - **** PII **** 4) Southwest Monitoring Team - **** PII ****

The Paulsboro Refinery Hazardous Materials Response Team researched Vinyl Chloride and determined that the Vapor Density is 2.21* (heavier than air) and has an Ionization Potential of 9.99eV*, which could be detected using Photoionization Detectors (PIDs) with a 10.6eV lamp. The Paulsboro Refinery air monitoring instrumentation used during this incident was Industrial Scientific MX6 with 10.6eV PID. The instruments are calibrated monthly and bump tested daily automatically via iNet docking stations. The PIDs are calibrated to 100 ppm Isobutylene; therefore, the Vinyl Chloride PID Response Factor is 1.9 per the attached PID Response Factors table. For example, 100 ppm on a Paulsboro Refinery PID would be 190 ppm of Vinyl Chloride (assuming this is the only material present). The Response Factors were researched after the incident monitoring data was obtained. All results reported below is raw data, the Response Factor is NOT applied.

* NIOSH Pocket Guide to Chemical Hazards Online Web Version

Time	Readings (ppm)	Notes	Location
8:33	631	HazMat Team arrive on location, cannot zero equip., obtain high level alarms,	Corner of Commerce & Jefferson
8:34	694	informs IC of high levels.	Corner of Commerce & Jefferson
8:37	760		Corner of Commerce & Jefferson
8:40	0	HazMat Teams leaves incident and goes West to zero instruments.	Delaware & Billings
8:44	193	Shortly after zeroing equipment, obtain readings >100 near Heritages	Delaware & Billings
8:48	111		Delaware & Billings
8:55	35		Delaware & Roosevelt
8:55	35	HazMat (Incident Monitoring) Team moves Northwest out of high readings zone	Delaware in front of Paulsboro HS
9:00	4		Delaware & Roosevelt
9:05	0-5		Delaware in front of Paulsboro HS
9:30	11	PBR Monitoring Team	Billingsport Road - ExxonMobil Parking Lot
9:30	0		Billingsport Road - Paulsboro Refinery Main Gate
9:40	0	Southwest Monitoring Team	Billingsport Road & Broad Street - Ames Parking Lot
9:55	10	HazMat Team return to Incident Location	Conrail Shack North Side of RR Tracks, West side of Mantua Creek
10:00	1.2	Southwest Monitoring Team	Billingsport Road & Broad Street - Ames Parking Lot
10:05	7		Billingsport Road & Broad Street - Ames Parking Lot
10:10	9	PBR Monitoring Team	Billingsport Road RR Tracks Overpass
10:15	7		Billingsport Road & Broad Street - Ames Parking Lot
10:21	16	Southwest Monitoring Team	Billingsport Road & Broad Street - Ames Parking Lot
10:30	12		Billingsport Road & Broad Street - Ames Parking Lot
10:43	0	NuStar Monitoring Team**	NuStar Main Gate
10:43	1		NuStar Refinery Peak Reading
10:55	2	Incident Monitoring Team	Broad Street (Rt. 44) Bridge
11:00	0	Southwest Monitoring Team	Broad Street - Gibbstown Fire Dept, Old Wawa, Broad St. School
11:06	0-1	NuStar Monitoring Team**	NuStar Refinery Peak Reading
11:30	0	Incident Monitoring Team	Along Mantua Creek North & South of Incident location
11:35	0	Southwest Monitoring Team	Billingsport Road & Broad Street - Ames Parking Lot
12-14:00	0-50	Incident Monitoring Team	Along Mantua Creek South of Incident location
14:00		Paulsboro Incident Monitoring Team was informed by members of the Gloucester Country CBRN Team to clear the area and discontinued monitoring at incident.	

** NuStar Monitoring Team data called into Paulsboro Refinery Personnel. Nu Star data not included with data downloads, monitoring instrumentation, method, and exact locations are unknown to Paulsboro Refinery Team personnel.



CENTER FOR TOXICOLOGY
AND ENVIRONMENTAL HEALTH, LLC

Table 2
Hand-held Real-time Summary – November 30th 13:39 – 23:59

Community			
Analyte	Number of Readings	Number of Detections	Highest Concentration
LEL	77	0	<1.0 %
O2	54	54	21.3 %
Vinyl Chloride 131L	15	12	1.2 ppm
VOC	85	8	0.5 ppm
Evacuated Area			
LEL	21	0	<1.0 %
O2	11	11	21.6 %
Vinyl Chloride 131L	8	7	3 ppm
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Work Area			
LEL	2	0	<1.0 %
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PPM – parts per million

Serious Penalty Calculation - (rev-04/01/2012)
Gloucester County CBRNE Team
1200 North Delsea Drive
Clayton, NJ 08312

Inspection: 316609908

Citation 1, Item 4s

Gravity Based Penalty:

Severity:	High	Death, injuries resulting in permanent disability; or chronic, irreversible illnesses
Probability:	Greater	Likelihood of injury or illness is great
High/Greater	\$7,000	

Adjustment Factors:

Size (SF):	0.40	1 to 25 employees
Good Faith (GFF):	1.00	No-reduction given if there is no safety and health program or where a willful violation is found
History (HF):	1.00	No reduction shall be given to employers who have no PEOSH inspection history in the past five years, or for employers who have been cited by PEOSH for any serious citation other than a High/Greater gravity based penalty in the past five years.

Penalty:

Perdiem Penalty:	\$2,800
Abatement Date:	6/17/13
Total Accrual (Days):	-53
Accrued Penalty to Date:	-\$148,400

This penalty was arrived at using the PEOSH Procedure for Enforcement. This gravity based penalty was derived using the following formula: $((GBP \times HF) \times GFF) \times SF = \$Penalty/day$

Note Minimum Penalty is \$500/day

DOH2028

**New Jersey Department of Health and Senior Services
PEOSH Program**

OSHA 1B Form (Worksheet)

CSHO	C4835	Inspection #	316609908	Date of Inspection	01/15/2013
Employer Name	Gloucester County CBRNE Team				
Employee Name	** PII **			Occupation	Firefighter/DECON Team Member
Employee Address	** PII **				
Employee City	** PII **			Employee State	NJ
Employee Zip	** PII **		Employee Phone #	** PII **	
Total # Employees	9	Total Duration	12 hours	Frequency	1 day
Standard	29 CFR 1910.120(f)(3)(ii)			# of Instances of the Violation	1
Type of Violation	Serious	Citation #	1	Item #	5s
				Abatement Period (# of calendar days or date abatement due)	30 Days

Description of Citation(s)

LOCATION: Facility Wide

DESCRIPTION: The Gloucester County CBRNE Team did not offer employees who may have been injured, received a health impairment, developed signs or symptoms which may have resulted from exposure to hazardous substances resulting from an emergency incident, or exposed during an emergency incident to hazardous substances at concentrations above the permissible exposure limits or the published exposure levels without the necessary personal protective equipment being used, a medical examination and consultation as soon as possible following the emergency incident or development of signs or symptoms. On November 30, 2012, 9 members of the Washington Township Fire District that perform DECON for the Gloucester County CBRNE Team responded to a train bridge derailment in Paulsboro, New Jersey, which resulted in exposure to vinyl chloride above the permissible exposure limit.

[29 CFR 1910.120(q)(9)(ii), which pertains to employees performing emergency response to hazardous substances release, states any emergency response employees who exhibit signs or symptoms which may have resulted from exposure to hazardous substances during the course of an emergency incident either immediately or subsequently, shall be provided with medical consultation as required in paragraph (f) of this section.]

HAZARD: For employees who may have been injured, received a health impairment, developed signs or symptoms which may have resulted from exposure to hazardous substances resulting from an emergency incident, or exposed during an emergency incident to hazardous substances at concentrations above the permissible exposure limits or the published exposure levels without the necessary personal protective equipment being used, a medical examination and consultation was not offered as soon as possible following the emergency incident or development of signs or

symptoms.

EMPLOYEE EXPOSURE: On November 30, 2012, 9 members of the Washington Township Fire District that perform DECON for the Gloucester County CBRNE Team responded to a train bridge derailment in conjunction with the team's hazardous materials technicians. During the accident, one of six derailed train cars, which contained 176,000-gallons of vinyl chloride, was breached releasing vinyl chloride into the air and water. Vinyl Chloride has a permissible exposure limit (PEL) of 1 part per million (ppm) with an action level of 0.5 ppm. Additionally, no employee may be exposed to vinyl chloride at concentrations greater than 5 ppm averaged over any period not exceeding 15 minutes (STEL or short-term exposure limit).

During the incident, the DECON personnel from Gloucester County CBRNE Team were stationed and operating within the "hot zone" as identified by the incident commander. No respiratory protection was used during the entire response; although, air monitoring for vinyl chloride detected levels above the PEL, STEL and action level. All responding DECON members arrived in the "hot zone" at 1010 and stayed until they were debriefed at 1905. The Paulsboro Refinery HAZMAT team reported VOC concentrations at the incident scene at a maximum of 760 ppm at 0837 using MX6 iBrid photoionization detectors (PID). According to the manufacturer's information, the MX6 iBrid PID has a response factor of 1.9 for vinyl chloride, which could have calculated the maximum to 1444 ppm. Additionally, refinery personnel also recorded uncorrected elevated PID levels during the day for example 54 ppm at 1315 and 17.5 ppm at 1524. An outside contractor, Center for Toxicology and Environmental Health (CTEH), reported numerous results above the PEL using colorimetric detector tubes for vinyl chloride between 1339 and 2359 on November 30, 2012. Urine tests for first responders handled by CTEH had sampling results for thiodiglycolic acid, a metabolite of vinyl chloride, as high as 13 milligrams/gram (mg/g) creatinine, which translates to vinyl chloride air concentrations over 16 ppm. During the interview process, employees describe seeing vapor clouds, frost lines on the bridge and train cars, smelling "sweet" odors and hearing air monitoring personnel announce elevated levels as high as 30 ppm.

EMPLOYER KNOWLEDGE: During the opening conference, HAZMAT Chief Jack DeAngelo provided a copy of the Gloucester County CBRNE Team's operational guidelines. Operational Guideline 2817, titled *Hazardous Materials Technician Medical Screening*, states "a post-exposure examination shall also be required if a team member has been exposed to levels above the permissible exposure limits or published exposure levels for emergency situation whether or not there is an obvious injury/medical problem". According to Chief DeAngelo, "Gloucester County provides the current medical evaluations to its employees and will accept medical evaluations from contributing entities, such as Deptford Fire Department and the Washington Township Fire Department, as long as those evaluations meet their requirements". If a contributing entity's medical evaluation do not meet their requirements, Chief DeAngelo stated "Gloucester County would be responsible for providing the correct medical evaluation and has done so for several members".

Hazmat Deputy Chief Dennis Kappler of the Gloucester County CBRNE Team and Hazmat Deputy Coordinator Len Clark were later present at the incident scene on November 30, 2012. According to employee statement and Patrick Dolgos's activity form (ICS 214), all members the CBRNE team, technicians and operations level employees, were demobilized at the end of the day and all responders were notified at 1930 of the urine tests requested by Unified Command. Robert Hill, Director of the Gloucester County Fire Academy, was appointed safety officer on December 4, 2012, and gave safety briefings each morning which he stated urine tests are being collected for each responder to identify exposures. Chief DeAngelo was involved in the entire process after the initial response and gave regular updates to management personnel regarding the site activities as was aware of the urine sampling and results.

OPERATIONAL GUIDELINE

Division:	Operations	OG 2817 HAZARDOUS MATERIALS TECHNICIAN MEDICAL SCREENING
Section:	HazMat	
Effective Date:	04/01/04	
Revision Date:	03/02/09	

GENERAL INFORMATION (SUMMARY)

This procedure shall apply to all CBRNE HazMat Team members in order to establish the guidelines for medical screening by a physician including the frequency, types, and scope of said examinations (as required in CFR 29 1910.120).

This Operational Guideline applies to all Members of the CBRNE Team responding to and during emergency incidents. All Members will be familiar with the requirements outlined in this **OG**.

POLICY

A. Medical Record

1. Federal law requires records of all HazMat examinations to be kept for 30 years after the employee leaves employment.
2. Employees are encouraged to maintain personal exposure records.

B. Medical Opinions

1. Each physical performed requires (in accordance with federal law) a written medical opinion including, but not limited to, the physician's opinion about:
 - a. If the employee has detectable medical conditions that may impair or increase the risk to the employee's health in responding to HazMat scenes and/or using respirators.
 - b. Employee physical limitations.
 - c. Results of the exam and tests.

- d. A statement that the team member has been appraised of the examination results.
2. Employees shall be provided at no cost, upon request, with a copy of the medical opinion based upon the examination.

C. Assignment, Annual and Transfer Medical Examinations

1. Team members shall receive complete physical examinations bi-annually.
2. Prior to assignment to the CBRNE Team, new members shall undergo a physical examination to identify possible pre-existing medical problems and to detect "baseline" measurements to identify changes over a period of time.
3. A bi-annual physical shall be conducted to identify changes in health and possible exposures to hazardous materials over the previous 24 months.
4. A physical shall also be conducted when any member leaves the team. The results of this examination shall be used to identify both general health and the effects of exposure to various chemicals over the tenure of his/her assignment in the CBRNE Unit. This shall not be required if a complete hazardous materials physical has been conducted within the previous three months.
5. In accordance with federal law, the content of this physical is to be determined by the physician. The tests conducted may include, but not be limited to:
 - a. Physical examination
 - b. Cardiopulmonary evaluation
 - c. Condition that increase susceptibility to injury and/or illness or that would impair work
 - d. Conditions that would affect respirator use
 - e. Relevant x-rays
 - f. Blood work
 - g. Urinalysis

D. Post-Exposure Examinations

- ~~1. A medical examination shall be required if a CBRNE Team member is exposed to a hazardous material and exhibits signs and symptoms specific to the product(s) involved (or any un-attributable sign or symptom) and/or if he/she has any unidentifiable medical problem on an incident.~~
2. The post-exposure examinations shall also be required if a team member has been exposed to levels above the permissible exposure limits or published

exposure levels for emergency situations whether or not there is an obvious injury/medical problem.

3. A post-exposure examination shall also be required in the event of Personal Protective Equipment failure in the Hot Zone or during Decon.
4. Post-exposure examinations may also be conducted for other incidents. This determination shall be made by the CBRNE team Safety Officer on a case-by-case basis.
5. The content of this examination shall be at the discretion of the physician depending upon the known and/or suspected products involved.

E. Special Examinations

1. The attending physician may require more frequent medical examinations if he/she determines that an increased frequency of examinations is medically necessary.
2. These examinations shall consist of tests as determined by the physician.
3. Operational members trained in the use of chemical protective clothing shall receive bi-annual CBRNE physicals.

Vinyl chloride		Formula: CH ₂ =CHCl	CAS#: 75-01-4	RTECS#: KU9625000	IDLH: Ca [N.D.]
Conversion: 1 ppm = 2.56 mg/m ³		DOT: 1086 116P (inhibited)			
Synonyms/Trade Names: Chloroethene, Chloroethylene, Ethylene monochloride, Monochloroethene, Monochloroethylene, VC, Vinyl chloride monomer (VCM)					
Exposure Limits: NIOSH REL: Ca See Appendix A OSHA PEL: [1910.1017] TWA 1 ppm C 5 ppm [15-minute]				Measurement Methods (see Table 1): NIOSH 1507 OSHA 4, 75	
Physical Description: Colorless gas or liquid (below 7°F) with a pleasant odor at high concentrations. [Note: Shipped as a liquefied compressed gas.]					
Chemical & Physical Properties: MW: 62.5 BP: 7°F Sol(77°F): 0.1% F.L.P.: NA (Gas) IP: 9.99 eV RGasD: 2.21 VP: 3.3 atm FRZ: -256°F UEL: 33.0% LEL: 3.6% Flammable Gas		Personal Protection/Sanitation (see Table 2): Skin: Frostbite Eyes: Frostbite Wash skin: N.R. Remove: When wet (flamm) Change: N.R. Provide: Frostbite wash		Respirator Recommendations (see Tables 3 and 4): NIOSH #: ScbaF: Pd, Pp / SaF: Pd, Pp / AScba Escape: GmFS/ScbaE See Appendix E (page 351)	
		Incompatibilities and Reactivities: Copper, oxidizers, aluminum, peroxides, iron, steel [Note: Polymerizes in air, sunlight, or heat unless stabilized by inhibitors such as phenol. Attacks iron & steel in presence of moisture.]			
Exposure Routes, Symptoms, Target Organs (see Table 5): ER: Inh, Con (liquid) SY: Lass; abdom pain; GI bleeding; enlarged liver; pallor or cyan of extremities; liquid: frostbite; [carc] TO: Liver, CNS, blood, resp sys, lymphatic sys [liver cancer]			First Aid (see Table 6): Eye: Frostbite Skin: Frostbite Breath: Resp support		

No IDLH shown....but PEL of 1PPM ...OK wear SCBA....MW – Heavier than air... Very flammable 3.6 – 33%, Not Soluble in water...Forget water fog for absorption – Notice the ERG Guide # 116P – P = possible polymerizer, Equal sign in Chem Formula equals polymerization potential, Note in Incompatibilities.

Compiled and prepared by Thomas
J. O'Connell

**Paulsboro Refinery Hazardous Materials Response Team Mutual Aid
11/30/12 Personnel Involvement & Timestamp of Air Monitoring Data**

Paulsboro Refinery Personnel & Involvement: 1) Incident Comment Post - Patrick Robinson, **** PII **** 2) Incident Monitoring Team - **** PII **** 3) Paulsboro Refinery (PBR) Monitoring Team **** PII **** 4) Southwest Monitoring Team - **** PII ****

The Paulsboro Refinery Hazardous Materials Response Team researched Vinyl Chloride and determined that the Vapor Density is 2.21* (heavier than air) and has an Ionization Potential of 9.99eV*, which could be detected using Photoionization Detectors (PIDs) with a 10.6eV lamp. The Paulsboro Refinery air monitoring instrumentation used during this incident was Industrial Scientific MX6 with 10.6eV PID. The instruments are calibrated monthly and bump tested daily automatically via iNet docking stations. The PIDs are calibrated to 100 ppm Isobutylene; therefore, the Vinyl Chloride PID Response Factor is 1.9 per the attached PID Response Factors table. For example, 100 ppm on a Paulsboro Refinery PID would be 190 ppm of Vinyl Chloride (assuming this is the only material present). The Response Factors were researched after the incident monitoring data was obtained. All results reported below is raw data, the Response Factor is NOT applied.

* NIOSH Pocket Guide to Chemical Hazards Online Web Version

Time	Readings (ppm)	Notes	Location
8:33	631	HazMat Team arrive on location, cannot	Corner of Commerce & Jefferson
8:34	694	zero equip., obtain high level alarms,	Corner of Commerce & Jefferson
8:37	760	informs IC of high levels.	Corner of Commerce & Jefferson
8:40	0	HazMat Teams leaves incident and goes West to zero instruments.	Delaware & Billings
8:44	193	Shortly after zeroing equipment, obtain	Delaware & Billings
8:48	111	readings >100 near Heritages	Delaware & Billings
8:55	35	HazMat (Incident Monitoring) Team moves Northwest out of high readings zone	Delaware & Roosevelt
8:55	35		Delaware in front of Paulsboro HS
9:00	4		Delaware & Roosevelt
9:05	0-5		Delaware in front of Paulsboro HS
9:30	11	PBR Monitoring Team	Billingsport Road - ExxonMobil Parking Lot
9:30	0		Billingsport Road - Paulsboro Refinery Main Gate
9:40	0	Southwest Monitoring Team	Billingsport Road & Broad Street - Ames Parking Lot
9:55	10	HazMat Team return to Incident Location	Conrail Shack North Side of RR Tracks, West side of Mantua Creek
10:00	1.2	Southwest Monitoring Team	Billingsport Road & Broad Street - Ames Parking Lot
10:05	7		Billingsport Road & Broad Street - Ames Parking Lot
10:10	9	PBR Monitoring Team	Billingsport Road RR Tracks Overpass
10:15	7	Southwest Monitoring Team	Billingsport Road & Broad Street - Ames Parking Lot
10:21	16		Billingsport Road & Broad Street - Ames Parking Lot
10:30	12		Billingsport Road & Broad Street - Ames Parking Lot
10:43	0	NuStar Monitoring Team**	NuStar Main Gate
10:43	1		NuStar Refinery Peak Reading
10:55	2	Incident Monitoring Team	Broad Street (Rt. 44) Bridge
11:00	0	Southwest Monitoring Team	Broad Street - Gibbstown Fire Dept, Old Wawa, Broad St. School
11:06	0-1	NuStar Monitoring Team**	NuStar Refinery Peak Reading
11:30	0	Incident Monitoring Team	Along Mantua Creek North & South of Incident location
11:35	0	Southwest Monitoring Team	Billingsport Road & Broad Street - Ames Parking Lot
12-14:00	0-50	Incident Monitoring Team	Along Mantua Creek South of Incident location
14:00		Paulsboro Incident Monitoring Team was informed by members of the Gloucester County CBRN Team to clear the area and discontinued monitoring at incident.	

** NuStar Monitoring Team data called into Paulsboro Refinery Personnel. Nu Star data not included with data downloads, monitoring instrumentation, method, and exact locations are unknown to Paulsboro Refinery Team personnel.



Table 2
Hand-held Real-time Summary – November 30th 13:39 – 23:59

Community			
Analyte	Number of Readings	Number of Detections	Highest Concentration
LEL	77	0	<1.0 %
O2	54	54	21.3 %
Vinyl Chloride 131L	15	12	1.2 ppm
VOC	85	8	0.5 ppm
Evacuated Area			
LEL	21	0	<1.0 %
O2	11	11	21.6 %
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PPM – parts per million



CENTER FOR TOXICOLOGY
AND ENVIRONMENTAL HEALTH, LLC

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CENTER FOR TOXICOLOGY
AND ENVIRONMENTAL HEALTH, LLC

11-13 10AM

December 6, 2012

Name _____

Agency _____

Date of Collection

11/30/2012

RE: Urine testing for Thiodiglycolic Acid (TdGA)

On Friday November 30, 2012 there was a release of Vinyl Chloride from a ruptured railcar in Paulsboro, NJ. Numerous workers were exposed to potentially high air concentrations of Vinyl Chloride without respiratory protection, before air monitoring was in place.

Emergency Responders (fire, police, EMS, etc) were self-identified as being exposed, and presented to the Gloucester County Fire Marshall's office for collection of urine samples for Thiodiglycolic Acid (abbreviated TdGA), which were sent to a national laboratory (NMS Labs). TdGA is a breakdown product of vinyl chloride, it can be used to evaluate workers if they had exposures to vinyl chloride levels higher than the current workplace limits (OSHA Permissible Exposure Level or PEL). However, TdGA can also be found normally in the urine of individuals without vinyl chloride exposure. A normal concentration, as indicated by the testing laboratory, is less than 2 mg/gram creatinine.

Results:

The urine TdGA level of the individual listed above was 13 mg/g creatinine

This TdGA level is normal (not elevated)

☒ This TdGA level is elevated. As a guideline, prior occupational studies have shown that workers exposed to various levels of Vinyl Chloride had the following urine TdGA levels, when tested after several shifts of workplace exposures:

Vinyl Chloride Air Concentrations	Urine TdGA Levels (mg per 24 hours)
1 ppm (current OSHA standard)	1.8
2 ppm	2.4
4 ppm	4.5
8 ppm	8.2
16 ppm	10.6


It is important for each tested individual to discuss these results with their occupational physician who is in charge of monitoring workplace exposures and medical issues, to determine if there is any further testing recommended.

Again, we appreciate all your help. Should your Occupational Physician have any questions regarding the test results or how to interpret them, please do not hesitate to call our offices at 501-614-2834.

Sincerely,

CTEH

ACTIVITY LOG (ICS 214)

1. Incident Name: E. Jefferson St. Bridge Derailment 2012		2. Operational Period: Date From: 11/30/2012 Time From:		Date To: 11/30/2012 Time To:
3. Name: Haz-Mat Branch		4. ICS Position:		5. Home Agency (and Unit):
6. Resources Assigned:				
Name		ICS Position		Home Agency (and Unit)
Gloucester County Haz-Mat Team CBRNE-1				
7. Activity Log:				
Date/Time	Notable Activities			
11/30/12 0710 hrs.	Responded to Paulsboro for Incident			
11/30/12 0717 hrs.	Spoke to J. Deangelo (GC Haz-Mat Team Leader) via phone. He advised he and other team leader's unavailable for response. Advised that I would be Haz-Mat Branch Director if assigned.			
11/30/12 0740 hrs.	Arrived on scene. Located ICP, face-to-face with IC. Advised of Haz-Mat response and that we would be staging at the Fire Academy. Recommended relocation of CP further away.			
11/30/12 0745 hrs.	Interfaced with Paulsboro Refinery Haz-Mat leaders (Chief Robinson / C. Harje) Advised that they started to meter area and that there team was assembling to conduct further metering. Advised IC of Haz-Mat Team Staging.			
11/30/12 0755 hrs.	Interfaced with Conrail official on location who showed me the consist of train. Advised that 4 cars derailed contained Vinyl Chloride and 1 car contained Denatured Alcohol. They were going to interface with IC			
11/30/12 0815 hrs.	Advised Haz-Mat Team in staging at Fire Academy to relocate to Broad St. Shopping Center in Paulsboro.			
11/30/12 0830 hrs.	Relocated to Broad St. to meet Gloucester County Haz-Mat Team members. Paulsboro Refinery personnel conducting A.M.			
11/30/12 0840 hrs.	Briefed Team of Situation with information gather from the IC and scene. Met with NJSP OEM (Godish)			
11/30/12 0900 hrs.	Approached in the parking lot with 18 people c/o Respiratory distress. EMS requested and HM Team members initiated Triage and care.			
	Staging for Haz-Mat consisted of CBRNE-1, Haz-Mat Techs and Decon enroute (Decon 10)			
11/30/12 0900 hrs.	HM Branch Director relocated to Paulsboro FD to meet with other agencies for coordination.			
11/30/12 09:20 hrs.	Relocated to ICP at Incident scene. Determined needs and roles. Advised IC of the 18 patients at HM Staging area.			
	GCHM Roles: #1- Decon assistance at Parking lot where 18 people c/o Resp. Distress. 2- Assist with Monitoring area of incident. 3- Interface with Conrail to determined needs from GCHM.			
11/30/12 09:40 hrs.	Tank Car Specialist from GCHM Tech Group requested to Scene.			
11/30/12 09:50 hrs.	Multi-agency briefing at Church w/ HM Branch and Tank Car Specialists			
11/30/12 10:35 hrs.	Requested to perform Rail Car Assessments with Conrail Reps. and CSX Haz-Mat group to determine needs of Teams.			
11/30/12 11:17 hrs.	GCHM members advised lack of metering equipment. Team to pair up with Paulsboro Refinery Haz-Mat.			
	Advised that GCHM would be assisting with continued Metering.			
8. Prepared by: Name: P. Dolgos Position/Title: Haz-Mat Branch Director Signature: 				
ICS 214, Page 1		Date/Time: 11/30/2012		

Serious Penalty Calculation - (rev-04/01/2012)
Gloucester County CBRNE Team
1200 North Delsea Drive
Clayton, NJ 08312

Inspection: 316609908

Citation 1, Item 5s

Gravity Based Penalty:

Severity:	High	Death, injuries resulting in permanent disability; or chronic, irreversible illnesses
Probability:	Greater	Likelihood of injury or illness is great
High/Greater	\$7,000	

Adjustment Factors:

Size (SF):	0.40	1 to 25 employees
Good Faith (GFF):	1.00	No-reduction given if there is no safety and health program or where a willful violation is found
History (HF):	1.00	No reduction shall be given to employers who have no PEOSH inspection history in the past five years, or for employers who have been cited by PEOSH for any serious citation other than a High/Greater gravity based penalty in the past five years.

Penalty:

Perdiem Penalty:	\$2,800
Abatement Date:	6/17/13
Total Accrual (Days):	-53
Accrued Penalty to Date:	-\$148,400

This penalty was arrived at using the PEOSH Procedure for Enforcement. This gravity based penalty was derived using the following formula:(((GBP x HF) x GFF) x SF) = \$Penalty/day

Note Minimum Penalty is \$500/day